SD College Barnala Books/Book Chapters (2018-2023)					
1	Mr. Ashwani Kumar Sikri (Mathematics)	ALGEBRA-II (Book)	2018	978-93-82295-63-1	First World Publications Ludhiana (Punjab)
2	Dr. Taraspal Kaur	Astitavi Talash Layi Tadpdi Manukhi Samvedna in book "Rooh di Umar de Kaav-Sarokar"(Book Chapter)	2018	978-93-87931-05-3	Taalif Parkashan, Barnala
3	Dr. Taraspal Kaur	Harcharan Si12ngh De Nataka Utte Shakespearn Prabhav in Book "Natak- kaar Haracharan Singh" (Book Chapter)	2018	978-93-89195-47-07	Sahitiya Academy, Delhi
4	Dr. Taraspal Kaur	Pendu Rangmanch da Agla Visthaar Kuldeep Singh Deep in Book "Samkaal Da Natakaar Dr kuldeep Singh Deep"(Book Chapter)	2018	978-93-83296-39-2	Lokgeet Parkashan, Chandigarh
5	Mr. Jagjeet Singh Wazidke	Sheese Da Rabb (Book)	2018	978-93-87931-24-4	Taalif Parkashan, Barnala
6	Mr. Jagjeet Singh Wazidke (Punjabi)	Gehrayiaan (Book)	2018	978-93-87931-2-51	Taalif Parkashan, Barnala
7	Mr. Jagjeet Singh Wazidke	Safar Dar Safar (Book)	2018	978-93-87931-27-5	Taalif Parkashan, Barnala
8	Mr. Swaran Singh	Role of Ethics in Modern Business: An important key Aspects of the concern (Page 327-329) in Conference Proceedings "Redefining Morals and Ethics Towards Transformative Global Citizenship Education for the 21st Century"	2018	978-81-940410-1-6	National Press Associates, New Delhi, India
9	Dr. Manish Kumar	Evaluation of Environmental Contaminants and Natural Products: A Human Health Perspective (Book)	2019	978-981-14-1095-6	Bentham Science Publishers, Singapore

10	Dr. Manish Kumar	Potential Health Benefits of Nutraceuticals for Human Health. In Book "Evaluation of Environmental Contaminants and Natural Products: A Human Health Perspective" pp 193-209. (Book Chapter)	2019	978-981-14-1095-6	Bentham Science Publishers, Singapore
11	Dr. Manish Kumar	Caspases and Phytochemicals: An Important Link in Cancer ChemopreventionIn Book "Evaluation of Environmental Contaminants and Natural Products: A Human Health Perspective" pp 210-243. (Book Chapter)	2019	978-981-14-1095-6	Bentham Science Publishers, Singapore
12	Dr. Manish Kumar	Pollutants and Protectants: Evaluation and Assessment Techniques (Book)	2019	978-93-86768-76-6	IK International Publishers, New Delhi
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16	Dr. Sanjay Kumar Singh	Theoretical Study of Physical Properties of YbN, YbP and YbAs Compound (Book)	2019	978-613-9-93900-8	Lambert Academic Publishing, Mauritius

17	Dr. Sanjay Kumar Singh	High Pressure Properties of Lutetium Monopnictides (LuX, X = N, P, As) (Book)	2019	978-6138913924	Press Scjholar's/OmniScriptum Publishing Group, Mauritius
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21	Ms. Gitanjali Jain	Entrepreneurship and Governance (Book)	2020	978-81-92954543-4- 9	RD Publications, Jalandhar, India
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32	Dr. Tarspal Kaur	Shahrag (Book)	2021	978-93-91298-10-4	Talif Publication, Barnala, Punjab, India
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Principal S.D. College Barnala

PRECIZE

ALGEBRA-II

For

B.A./B.Sc.-III (SEMESTER-VI) (Pbi. U.)

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PREFACE

the present book is the culmination of honest and sincere the meet the requirements of who opt for mathematics at the Graduation level. The subject matter has been arranged in a systematic, almple, fucid and exhaustive manner to meet the definitions followed by theorems with complete proofs with moods of all types of learners. Each chapter begins with with malived problems so that the study leads to perfect clarity understanding. A large number of notes and remarks have shapter to provide the students with an opportunity of added for a better understanding of the subject. Wellplaitingd and exhaustive exercises have been given in each extraustive practice. Haddad,

A serious effort has been made to keep the book free from embrs, but even then some errors might have crept in. Buggestions for the improvement of the book will be gratefully #dknowledged.

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Authors

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ਕੰਵਰਜੀਤ ਭੱਠਲ ਦੀ 'ਰੂਹ ਦੀ ਉਮਰ' ਦੇ ਕਾਵਿ-ਸਰੋਕਾਰ

ਸੰਪਾਦਕ ਡਾ. ਭੂਪਿੰਦਰ ਕੌਰ ਈਵਨਿੰਗ ਵਿਭਾਗ, ਪੰਜਾਬ ਯੂਨੀਵਰਸਿਟੀ, ਚੰਡੀਗੜ੍ਹ

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ਅੰਤਰੀਵੀ ਰਿਸ਼ਤੇ ਨੂੰ ਪ੍ਰਭਾਸ਼ਿਤ ਵੀ ਕਰਦਾ ਹੈ। ਉਹ ਆਪਣੇ ਜੀਵਨ ਨੂੰ ਆਪਣੀ ਰੂਹ ਦੀਆਂ ਸ਼ਰਤਾਂ ਅਨੁਸਾਰ ਜਿਉਣਾ ਚਾਹੁੰਦਾ ਹੈ। ਉਹ ਕਿਸੇ ਕਲਪਿਤ ਰੂਹਾਨੀ ਮੰਡਲਾਂ ਦੀ ਗੱਲ ਨਹੀਂ ਕਰਦਾ ਸਗੋਂ ਭੌਤਿਕ ਜੀਵਨ ਨੂੰ ਹੀ ਰੂਹਾਨੀ ਜਾਂ ਅੰਦਰਲੀ ਆਵਾਜ਼ ਦਾ ਅਨੁਸਾਰੀ ਬਨਾਉਣਾ ਚਾਹੁੰਦਾ ਹੈ :

ਸਮਾਂ ਆ ਗਿਆ ਹੈ ਹੁਣ ਜੋਗ ਲਈਏ ਚਿੰਦਗੀ ਤੋਂ ਤੇ ਰੂਹ ਦੀ ਲੇਮੀ ਉਮਰ ਲਈ ਦੁਆ ਕਰੀਏ।

(ਪੰਨਾ-113)

ਕੈਵਰਜੀਰ ਭੌਨਨ ਦੀਆਂ ਕਵਿਤਾਵਾਂ, ਗ਼ਜ਼ਲਾਂ ਤੇ ਗੀਤਾਂ ਵਿਚ ਵਰਤੇ ਗਏ ਬਿੰਬ ਤੇ ਪ੍ਰਤੀਕ ਉਸਦੇ ਅਨੁਭਵ ਖਂਤਰ ਤੋਂ ਬਾਹਰ ਦੇ ਨਹੀਂ ਹਨ। ਉਹ ਆਪਣੇ ਰੋਜ਼ਾਨਾ ਜੀਵਨ ਦੇ ਕਾਰ-ਵਿਚਾਰ ਤੇ ਆਪਣੇ ਆਲੇ-ਦੁਆਲੇ ਦੇ ਵਾਤਾਵਰਣ ਵਿਚੋਂ ਹੀ ਆਪਣੀਆਂ ਕਵਿਤਾਵਾਂ ਨੂੰ ਸ਼ਿੰਗਾਰਨ ਵਾਲੇ ਬਿੰਬ ਤੇ ਪ੍ਰਤੀਕ ਤਲਾਬ ਲੈਂਦਾ ਹੈ। ਉਹ ਲੰਅ-ਥੱਧ ਕਵਿਤਾ ਵੀ ਲਿਖਦਾ ਹੈ ਤੇ ਖੁੱਲ੍ਹੀ ਵੀ ਪਰ ਪ੍ਰਗੀਤਕ ਕਵਿਤਾ ਲਿਖਣ ਵਿਚ ਉਸ ਨੂੰ ਵਿਥੇਬ ਮੁਹਾਰਤ ਹਾਸ਼ਿਲ ਹੈ। ਉਸ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਅਸਲ ਵਿਚ ਉਸ ਦੇ ਹੀ ਜੀਵਨ ਫ਼ਲਸਡੇ ਦੀਆਂ ਗੁਝੀਆਂ ਰਮਜ਼ਾਂ ਦੀ ਹੀ ਤਰਜ਼ਮਾਨੀ ਕਰਦੀਆਂ ਹਨ। ਇਹ ਕਾਵਿ ਸੰਗ੍ਰਹਿ ਨਵੀਂ ਪੰਜਾਬੀ ਕਵਿਤਾ ਵਿੱਚ ਅਹਿਸਾਸ ਦੇ ਪੱਧਰ ਤੇ ਹੋਰ ਨਵਾਂ ਪਣ ਲਿਆਉਣ ਵਾਲਾ ਹੈ। ਉਸ ਦੀ ਕਵਿਤਾ ਵਿਚਲੀ ਮਾਨਵੀ ਵੇਦਨਾ ਤੇ ਸੇਵੇਦਨਾ ਭਾਵੇਂ ਕਈ ਵਾਰ ਮਨੁੱਖੀ ਜੀਵਨ ਦੀ ਉਦਾਸ ਤਸਵੀਰ ਵੀ ਉਘੰੜਦੀ ਹੈ ਪਰ ਵਿਗਸੇ ਵਿਚਲੀ ਮਿਲੀ ਲੋਕ ਕਲਿਆਣਕਾਰੀ ਤੇ ਮਾਨਵਤਾਵਾਦੀ ਵਿਚਾਰਧਾਰਾ ਇਸ ਉਦਾਸੀ ਨੂੰ ਛੇਗੇ ਵੀ ਸੰਘਰਸ਼ੀ ਭਾਵਨਾਂ ਵਿਚ ਤਬਦੀਲ ਕਰ ਦੇਂਦੀ ਹੈ।

ਭੱਠਲ ਦੀ ਕਾਵਿ ਸੰਵੇਦਨਾ ਦੀਆਂ ਹੋਰ ਵੀ ਬਹੁਤ ਸਾਰੀਆਂ ਪਰਤਾਂ ਹਨ ਜਿਨ੍ਹਾਂ ਨੂੰ ਇਸ ਨਿੱਕ ਆਕਾਰੀ ਲੱਖ ਵਿਚ ਨਹੀਂ ਜਮੇਟਿਆ ਜਾ ਸਕਦਾ। ਕਵਿਤਾ ਦੀਆਂ ਨਿੱਜੀ, ਸਾਮੂਹਿਕ ਤੋਂ ਬ੍ਹਿਮੰਡੀ ਚੇਤਨਾ ਨਾਲ ਜੁੜੀਆਂ ਸੰਵੇਦਨਾਤਮਕ ਪਰਤਾਂ ਉਸ ਨੂੰ ਆਪਣੇ ਸਮੇਂ ਦਾ ਚਾਣੀ ਕਵੀ ਕਹਾਉਣ ਦਾ ਹੱਕ ਪ੍ਰਦਾਨ ਕਰਦੀਆਂ ਹਨ। ਆਮ ਕਰਕੇ ਸਾਹਿਤ ਪਾਠ ਵਿਚ ਬੋੜ੍ਹੀ ਜਿਹੀ ਦਿਲਚਸਪੀ ਰੱਖਣ ਵਾਲੇ ਪਾਠਕ ਵੀ ਉਸ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਦਾ ਪਾਠ ਸਹਿਜਤਾ ਨਾਲ ਕਰ ਸਕਦਾ ਹੈ ਫਿਰ ਵੀ ਉਸ ਦੀਆਂ ਕੁਝ ਕਵਿਤਾਵਾਂ ਤੇ ਐਤਰਮੁੱਖੀ ਹੋਣ ਦਾ ਲੇਬਲ ਲਾਇਆ ਜਾ ਸਕਦਾ ਹੈ, ਬਿਊਂਕਿ ਇਹਨਾਂ ਕਵਿਤਾਵਾਂ ਦੇ ਭਾਵ-ਬੋਧ ਤੱਕ ਪਹੁੰਚਣ ਲਈ ਪਾਠਕਾਂ ਨੂੰ ਇੱਕ ਵਿਸ਼ੇਸ਼ ਪ੍ਰਕਾਰ ਦੀ ਬੁੱਧੀ ਪਰੀਖਿਆ ਦੇਣੀ ਪੈਂਦੀ ਹੈ ਤੇ ਇਹ ਮੈਨੂੰ ਵੀ ਦੇਣੀ ਪਈ ਹੈ। ਇਸ ਸੰਕ੍ਰਿਹਿਵਿਚ ਬਾਮਿਲ ਉਸ ਦੀ ਇਕ ਕਵਿਤਾ ਦੇ ਪ੍ਰੀਤਲੜੀ ਵਿਚ ਛਪਣ ਦਾ ਰਚਨਕਾਆਂ 1968 ਦਾ ਬਣਦਾ ਹੈ ਇਸ ਤਰ੍ਹਾਂ ਉਸ ਦੀਆਂ ਕਵਿਤਾਵਾਂ ਰਾਹੀਂ ਪਿੱਛਲੇ ਪੰਜ ਦਹਾਕਿਆਂ ਵਿਚ ਪੰਜਾਬੀ ਕਵਿਤਾ ਤੇ ਖੇਤਰ ਵਿਚ ਆਈਆਂ ਰੂਪਗਤ ਤੇ ਵਿਸ਼ਾਗਰ ਤਬਦੀਲੀਆਂ ਦਾ ਅਨੁਮਾਨ ਵੀ ਲਾਇਆ ਜਾ ਸਕਦਾ ਹੈ।

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ੰਤੂਹ ਦੀ ਉਮਰ' ਦੀਆਂ ਸੰਵੇਦਨਾਤਮਕ unu

(Astitavi Talash Loyi Tadpobi Manukhi Samvedna)
muissel sonu osel savel nadli Heeni

० इर, उत्सम्पन्त वैत

ਕੈਵਰਜੀਤ ਭੱਠਲ ਦਾ ਰੂਹ ਦੀ ਉਮਰ' ਦੂਜਾ ਕਾਵਿ-ਸੋਗ੍ਰਹਿ ਹੈ। ਉਹ ਇੱਕ ਪੰਗਾਵਿਤ ਜ਼ਰੂਰ ਕੀਤਾ ਹੈ। ਇਸੇ ਲਈ 95 ਕਵਿਤਾਵਾਂ ਦੀ ਇਹ ਪੁਸਤਕ ਕਈ ਵਰ੍ਹਿਆਂ ਵਿੱਚ ਲਿਖੀਆਂ ਨਜ਼ਮਾਂ ਦਾ ਮੁਜੱਸਮਾ ਹੈ। ਆਧੁਨਿਕ ਵਰਤਾਰੇ ਵਿੱਚ ਪੁਸਤਕ ਕਈ ਸਦੀ ਦੇ ਬਾਇਰਾਂ ਨੇ ਕਵਿਤਾ ਦੇ ਨਵੇਂ ਮੁਹਾਂਦਰੇ ਤਲਾਬ ਕੀਤੇ ਹਨ। ਉੱਤਰ-ਆਧੁਨਿਕਤਾ ਅਜੇ ਦਿਸ਼ਵੀਕਰਣ ਦੀ ਹੋੜ ਨੇ ਸਮਾਜ਼ਿਕ-ਆਰਥਿਕ ਮੁੱਲਾਂ ਨੂੰ ਢਾਹ ਲਾਈ ਹੈ। ਉੱਥੇ ਅੱਜ ਦੇ ਮਨੁੱਖ ਨੂੰ ਅੰਤਰੀਵੀ ਤੌਰ 'ਤੇ ਵੀ ਖੇੜੂ-ਖੇਰੂ ਕਰ ਦਿੱਤਾ ਹੈ। 'ਰੂਹ ਦੀ ਉਮਰ' ਦੀਆਂ ਸਾਰੀਆਂ ਕਵਿਤਾਵਾਂ ਇਸ ਦਵੰਦਾਤਮਕ ਤੇ ਕਦਰਾਂ-ਕੀਮਤਾਂ ਪੱਥੇ ਨਿੰਘਰੇ ਹੋਏ ਵਰਤਾਰੇ ਦਾ ਲੱਗਪਗ ਹਰੇਕ ਪਾਸਾ ਪੇਸ਼ ਕਰਦੀਆਂ ਨਜ਼ਰ ਆਉਂਦੀਆਂ ਹਨ। ਇਹ ਵਰਤਾਰਾ ਸਿਰਫ਼ ਕਿਸੇ ਇੱਕ ਸਮਾਜ ਤੱਕ ਸੀਮਿਤ ਨਜ਼ਰ ਨਹੀਂ ਆਉਂਦਾ ਸਗੋਂ ਵਿਸ਼ਵੀ ਪ੍ਰਸੰਗਾਂ ਨੂੰ ਮਨੁੱਖੀ ਮਸਤਕ ਤੱਕ ਉਤਾਰ ਕੇ ਚਿੰਤਨ ਦਾ ਵਿਸ਼ਾ ਬਣਾਉਂਦਾ ਹੈ। ਧੁਰ ਹਰੇਕ ਨਜ਼ਮ 'ਚ ਪ੍ਰਤੱਖ ਹੈ। ਉਹ ਆਪਣੇ ਅਸ਼ਤਿਤਵ ਨੂੰ ਟਟੋਲਦਾ ਆਪਣੀ ਕਵਿਤਾ ਆਖਰੀ ਇਲਤਜ਼ਾ' ਵਿੱਚ ਬਿਆਨਦਾ ਹੈ।

ਸਾਰੀ ਉਮਰ ਮੈਂ ਬਹਾਰ ਨਹੀਂ ਤੱਕੀ ਮੇਗੇ ਅਰਥੀ 'ਤੇ ਫੁੱਲ ਕੋਹੇ ਤਪੱਸਿਆ ਉਮਰ ਭਰ ਦੀ ਹੋ ਗਈ ਵਿਅਰਥ ਮੇਰੀ ਚਿੰਤਾ ਤਾਂ ਹੈ – ਚੇਤੰਨ ਵੀ ਹਾਂ ਹੁਣ ਜਨਮ ਲੈਣਾ ਹੀ ਪਏਗਾ ਇੱਕ ਹੋਰ...।

ਭੱਠਨ ਦੀ ਲੱਗਪਗ ਸਾਰੀ ਕਵਿਤਾ ਰਾਜਨੀਤਿਕ, ਸਮਾਜਿਕ ਅਸਾਵੇਪਣ ਨੂੰ ਆਪਣੇ ਕਲੇਵਰ 'ਚ ਲੇਂਦੀ ਹੈ। ਇਸ ਦਾ ਕਾਰਨ ਇਹ ਹੈ ਕਿ ਉਹ ਆਪ ਜਵਾਨੀ ਪਹਿਰੇ ਬਰਨਾਲੇ ਦੇ ਇਲਾਕੇ ਦੀਆਂ ਸੱਠਵਿਆਂ-ਸੈਂਤਰਵਿਆਂ ਦੀਆਂ ਸਮਾਜਿਕ ਰਾਜਸੀ ਲਹਿਰਾਂ ਦੇ ਪ੍ਰਭਾਵ ਹੇਠ ਰਿਹਾ ਹੈ। ਉਹ ਆਜ਼ਾਦ ਮੁਲਕ ਭਾਰਤ ਦੀ ਵਿਵਸਥਾ ਦੀਆਂ ਸਾਰੀਆਂ ਪਾਸੀਆਂ ਨੂੰ ਦਰਸਾਉਂਦਾ ਹੈ। ਉਸ ਦਾ ਸਹਿਜ-ਸੁਭਾਅ ਆਪਣੀ ਗੱਲ ਕਹਿ ਜਾਣਾ, ਉਸ ਦ ਸਰਲ-ਕਾਵਿ ਦਾ ਪ੍ਰਮਾਣ ਹੈ। ਉਹ ਨਿਰਡੈ ਹੋ ਕੇ ਆਪਣੀ ਸੰਵੇਦਨਾ ਦਾ ਪ੍ਰਗਟਾਵਾ ਖੜੀ ਸਰਲਤਾ ਤੇ ਪ੍ਰਭਾਵਸ਼ਾਲੀ ਤਰੀਕੇ ਨਾਲ ਕਰਦਾ ਹੈ। ਉਸ ਦੀ ਕਵਿਤਾ 'ਸਮੇਂ' ਦੇ ਹਾਕਮ' ਵਿੱਚੋਂ :

ਇਹ ਸਮੇਂ ਦੇ ਹਾਕਮ ਹਰ ਨਵਾਂ ਸੂਰਜ ਉੱਗਣ ਦੇ ਨਾਲ

ਖੈਵਰਜੀਤ ਤੱਠਲ ਦੀ 'ਰੂਹ ਦੀ ਉਮਰ' ਦੇ ਕਾਵਿ-ਸਰੋਕਾਰ ____

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ਨਾਟਕਕਾਰ ਹਰਚਰਨ ਸਿੰਘ

(Natakkar Harcharan Singh)

_{ਸੈਪਾਦਕ} ਸਤਨਾਮ ਸਿੰਘ ਜੱਸਲ



ਸਾਹਿਤ ਅਕਾਦੇਮੀ

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ਸਿੰਘ, ਗੁਰਦਿਆਨ ਸਿੰਘ ਭੁੱਲ, ਸ਼ੇਰ ਸਿੰਘ ਸੇਖ਼ ਕਿਸੇ ਨਾ ਕਿਸੇ ਰੂਪ ਵਿਚ ਅੰਗਰੇਜ਼ੀ ਨਾਟਕ ਦਾ ਪ੍ਰਭਾਵ ਕੁਝੂਲਦੇ ਹਨ। ਅੰਗਰੇਜ਼ੀ ਨਾਟਕ ਰਾਹੀ ਪ੍ਰਭਾਵ ਪਾਉਣ ਵਾਲਾ ਸਭ ਤੋਂ ਪਹਿਲਾ ਨਾਟਕਕਾਰ ਬੈਕਸਪੀਅਰ ਹੈ ਜਿਸ ਨੇ ਪਰਿਦਾਂ ਪੀੜ੍ਹੀ ਦੇ ਪੰਜਾਬੀ ਨਾਟਕਕਾਰਾਂ ਉੱਤੇ ਕੁਝਾਯੋਗ ਪ੍ਰਭਾਵ ਪਾਇਆ। ਆਈ ਸੀ ਨੇਦਾ ਦੇ ਬਾਅਦ ਅੰਗਰੇਜ਼ੀ ਨਾਟਕ ਦਾ ਪ੍ਰਭਾਵ ਕੁਝੂਲਣ ਵਾਲਾ ਅਗਲਾ ਨਾਟਕੁਰਾਰ ਡਾ ਹਰਚਰਨ ਸਿੰਘ ਹੈ। ਜਦੋਂ ਅਸੀਂ ਹਰਚਰਨ ਸਿੰਘ ਦੇ ਇਤਿਹਾਸਕ ਜਾ ਸਮਾਜਿਕ ਨਾਟਕਾਂ ਦੀ ਗੋਲ ਕਰਦੇ ਹਾਂ ਤਾਂ ਸਮਕਾਲੀਨ ਪ੍ਰਸੰਗ ਵਿਚ ਬਾਸ ਕਰ ਉਹ ਆਪਣੇ ਇਤਿਹਾਸਕ ਨਾਟਕਾਂ ਨੂੰ ਉਵੇਂ ਹੀ ਪੇਸ਼ ਕਰਦਾ ਹੈ ਜਿਵੇਂ ਕਿ ਬੈਕਸਪੀਅਰ ਨੇ ਆਪਣੇ ਪ੍ਰਸਿੱਧ ਨਾਟਕਾਂ ਵਿਚ ਕੀਤਾ। ਉਸ ਨੇ 1937 ਈ ਵਿਚ ਆਪਣਾ ਪਹਿਲਾ ਪੂਰਾ ਨਾਟਕ ਕਮਲਾ ਕੁਮਾਰੀ ਲਿਖ ਕੇ ਆਪਣੀ ਨਾਟ-ਯਾਤਰਾ ਦਾ ਆਰੰਭ ਕੀਤਾ।

ਹਰਚਰਨ ਸਿੰਘ ਜਿੱਥੇ 'ਕਮਲਾ ਕੁਮਾਰੀ, 'ਸ਼ੋਭਾ ਸ਼ਕਤੀ', 'ਰੋਤਾ ਸਾਲੂ ਵਿਚ ਸਮਜਿਕ ਪਰਸਥਿਤੀਆਂ ਅਤੇ ਅੱਰਤ ਦੀ ਗੁਸਦੀ ਬਿਆਨ ਕਰਦਾ ਹੈ ਉੱਥੇ 'ਰਾਜਾ ਪੋਰਸ', 'ਚਮਕੌਰ ਦੀ ਗੜ੍ਹੀ', 'ਪੁਨਿਆਂ ਦਾ ਚੰਨ', 'ਹਿੰਦ ਦੀ ਚਾਦਰ', 'ਮਿਟੀ ਪੁੱਦ ਜੁਗ ਚਾਨਣ ਹੋਆ' ਅਤੇ 'ਇਤਿਹਾਸ ਜਵਾਬ ਮੰਗਦਾ ਹੈ' ਆਦਿ ਵਿਚ ਪੰਜਾਬ ਦੇ ਇਤਿਹਾਸਕ ਗੋਰਵ ਨੂੰ ਰੁਪਮਾਨ ਕਰਦਾ ਹੈ। ਆਪਣੇ ਨਾਟਕਾਂ ਵਿਚ ਪੰਜਾਬ ਦੇ ਇਤਿਹਾਸਕ ਗੋਰਵ ਨੂੰ ਰੁਪਮਾਨ ਕਰਦਾ ਹੈ। ਆਪਣੇ ਨਾਟਕਾਂ ਵਿਚ ਪੁਜਾਬ ਦੇ ਇਤਿਹਾਸਕ ਗੋਰਵ ਨੂੰ ਰੁਪਮਾਨ ਕਰਦਾ ਹੈ। ਆਪਣੇ ਨਾਟਕਾਂ ਰਾਹੀ ਸਮਕਾਨੀਨ ਪ੍ਰਸੰਗਾਂ ਨੂੰ ਖੂਬ ਚਿਤਰਿਆ ਹੈ। ਉਸ ਦੇ ਲਗਭਗ ਸਾਡੇ ਹੀ ਨਾਟਕ ਚਾਹੇ ਉਹ ਸਮਾਜਿਕ ਸਰੋਕਾਰਾਂ ਨਾਲ ਸੰਬੰਧਿਤ ਹੋਣ ਜਾਂ ਇਤਿਹਾਸਕ ਯਥਾਰਥਵਾਦ ਦੀ ਵਿਆਖਿਆ ਕਰਦੇ ਹੋਣ ਉਸ ਦੇ ਜਾਵੇਂ ਹੀ ਨਾਟਕ ਚਾਹੇ ਉਹ ਸਮਾਜਿਕ ਸਰੋਕਾਰਾਂ ਨਾਲ ਸੰਬੰਧਿਤ ਹੋਣ ਜਾਂ ਇਤਿਹਾਸਕ ਯਥਾਰਥਵਾਦ ਦੀ ਵਿਆਖਿਆ ਕਰਦੇ ਹੋਣ ਉਸ ਦੇ ਜਾਵੇਂ ਹੀ ਨਾਟਕਾਂ ਉਪਰ ਸੰਕਸਪੀਅਰ ਦਾ ਪ੍ਰਭਾਵ ਦੇਖਿਆ ਜਾ ਸਕਦਾ ਹੈ। ਡਾ. ਹਰਚਰਨ ਸਿੰਘ ਨੇ ਖੁਦ ਵੀ ਇਸ ਪ੍ਰਭਾਵ ਨੂੰ ਕੁਝੂਲ ਕੀਤਾ ਹੈ। ਇਸ ਦਾ ਪ੍ਰਮਾਣ ਵੀ ਪ੍ਰਾਹਤ

ਕਮਲਾ ਕੁਮਾਰੀ ਨਾਟਕ ਮੈਂ 1937 ਵਿਚ ਲਿਖਿਆ ਸੀ। 1937 ਵਿਚ ਵੱਧੇ ਪਹਿਲੇ ਨਾਟਕ 'ਕਮਲਾ ਕੁਮਾਰੀ' ਤੋਂ ਹੀ ਮੈਂ ਅਧਿਐਨ ਸ਼ੁਰੂ ਕੀਤਾ। ਬਰਨਾਰਡ ਬਾਅ ਦੀਆਂ ਭੂਮਿਕਾਵਾਂ ਪੜ੍ਹਨ ਦੇ ਬਾਅਦ ਮੈਂ ਵੀ ਸਮਲਾ ਕੁਮਾਰੀ ਬਾਰੇ ਭੂਮਿਕਾ ਲਿਖਣ ਦਾ ਵਿਚਾਰ ਬਣਾਇਆ। ਕਮਲਾ ਕੁਮਾਰੀ ਮੈਂ ਡੈਕਸਪੀਅਰ ਦੇ ਰੋਮਾਇਕ ਸੁਖਾਂਤ ਦੇ ਅਸਰ ਹੋਠ ਲਿਖਿਆ ਹੈ। ਸੋਤ ਸਿੰਘ ਸੰਖੇ ਨੇ ਵੀ ਕਮਲਾ ਕੁਮਾਰੀ ਨੂੰ ਬੈਕਸਪੀਅਰ ਦੇ ਨਾਟਕਾਂ ਵਾਂਗ ਨਿਰੋਲ ਕੁਮਾਚਿਕ ਸੁਖਾਂਤ ਨਾਟਕ ਕਿਹਾ ਹੈ।

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Research Paper

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ਡਾ. ਤਰਸਪਾਲ ਕੌਰਾ

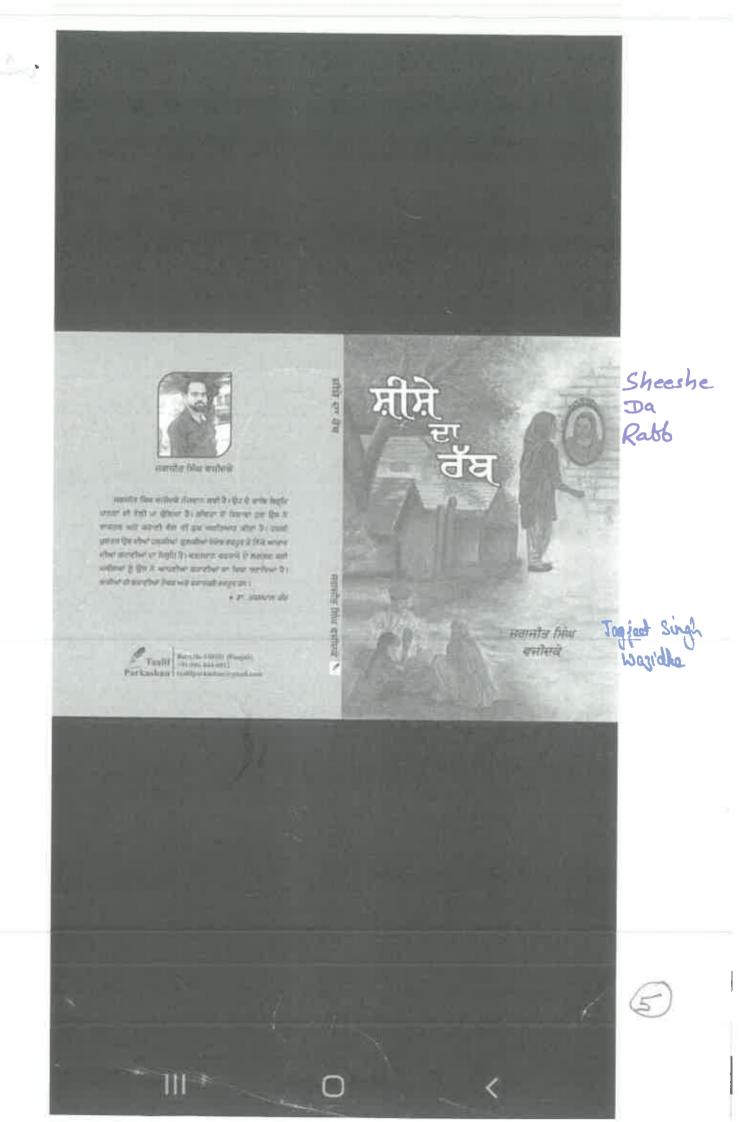
ਮਨੋਵਿਗਿਆਨਕ ਯਥਾਰਥਵਾਦ, ਆਰਤੋਂ ਦੇ 'ਬੀਏਟਰ ਆਫ਼ ਕਰੁਐਲਟੀ' ਅਤੇ ਪੰਜਾਬੀ ਨਾਟਕ ਨੇ ਵਿਕਾਸ ਕੀਤਾ। ਜਿਥੇ ਆਈ. ਸੀ. ਨੰਦਾ, ਹਰਚਰਨ ਸਿੰਘ, ਸੱਤ ਗੁਹਿਣ ਕਰਦੇ ਹੋਏ ਬਹੁਤ ਸਾਰੀਆਂ ਲਹਿਰਾਂ ਅਤੇ ਝੁਕਾਵਾਂ ਅਧੀਨ ਆਧੁਨਿਕ ਹੋਂਦ ਵਿਚ ਆਇਆ। ਸਮਕਾਲੀ ਸਮਾਜਿਕ-ਰਾਜਸੀ ਗਤੀਵਿਧੀਆਂ ਤੋਂ ਪ੍ਰਭਾਵ ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਨਾਟਕ ਅੰਗਰੇਜ਼ੀ ਸਾਹਿਤ ਅਤੇ ਸੱਭਿਆਚਾਰ ਦੇ ਪ੍ਰਭਾਵ ਅਧੀਨ ਤਕ ਹੋਈਆਂ ਖੋਜਾਂ ਅਤੇ ਤੱਥਾਂ ਦੇ ਆਧਾਰ 'ਤੇ ਇਹ ਗੱਲ ਸਪੱਸ਼ਟ ਹੋ ਚੁੱਕੀ ਹੈ ਕਿ ਭੂਮਿਲਾ ਨਿਭਾਉਂਦੇ ਹਨ। 20ਵੀਂ ਸਦੀ ਵਿਚ ਪੱਛਮ ਵਿਚ ਉਤਪੰਨ ਹੋਈ ਯਥਾਰਥਵਾਦੀ ਆਪਣਾ ਪ੍ਰਭਾਵ ਉਲੀਕਣਾ ਸ਼ੁਰੂ ਕਰਦੀ ਹੈ। ਪੰਜਾਬੀ ਨਾਟਕ ਦੇ ਬਦਲਦੇ ਪਰਿਪੇਖ ਪੁੱਯੋਗ ਕਰਦਾ ਹੈ। ਇਸ ਦੇ ਨਾਲ ਹੀ ਪੰਜਾਬੀ ਨਾਟਕ 'ਤੇ ਪ੍ਰਯੋਗਵਾਦੀ ਲਹਿਰ ਵੀ ਬਰੈਖ਼ਤ ਦੇ 'ਐਪਿਕ ਬੀਏਟਰ' ਦੇ ਸੰਕਲਪਾਂ ਨੂੰ ਪੰਜਾਬੀ ਨਾਟਕ ਤੇ ਰੰਗਮੰਚ ਉਪਰ ਲਿਆਉਂਦੇ ਹਨ ਉਥੇ ਇਸ ਦੇ ਸਮਾਨਾਂਤਰ ਬਲਵੰਤ ਕਾਰਗੀ ਸਟਰਿੰਡਬਰਗ ਦੇ ਸ਼ਹਿਰੀ ਸ਼੍ਰੇਣੀ ਦੀਆਂ ਸਮਾਜਿਕ ਸਮੱਸਿਆਵਾਂ ਨੂੰ ਆਪਣੇ ਨਾਟਕਾਂ ਰਾਹੀਂ ਮੰਚ 'ਤੇ ਸਿੰਘ ਸੇਖੋਂ ਤੇ ਪਹਿਲੀ-ਦੂਜੀ ਪੀੜ੍ਹੀ ਦੇ ਹੋਰ ਨਾਟਕਕਾਰ ਸਮਕਾਲੀ ਮੱਧਵਰਗੀ ਪ੍ਰਭਾਵ ਗੁਹਿਣ ਕਰਦੇ ਹੋਏ ਅਜੋਕੇ ਦੌਰ ਤਕ ਦੇ ਨਾਟਕ ਤਕ ਪਹੁੰਚ ਕੀਤੀ ਹੈ। ਹੁਣ ਨਾਟਕਾਂ ਤੋਂ ਸ਼ੁਰੂਆਤ ਕਰਦਿਆਂ ਅਨੋਕਾਂ ਹੀ ਰੰਗਮੰਚ ਅਤੇ ਨਾਟ-ਸ਼ੈਲੀਆਂ ਦਾ ਹੈ। ਆਪਣੇ ਇਤਿਹਾਸਕ ਵਿਕਾਸ ਦੌਰਾਨ ਇਸ ਨੇ ਆਰੰਭਕ ਪੜਾਅ ਭਾਵ ਸੁਧਾਰਵਾਦੀ ਲਹਿਰ ਪੰਜਾਬੀ ਨਾਟਕ ਅਤੇ ਚੰਗਮੰਚ ਨੂੰ ਵੀ ਇਕ ਨਵੇਂ ਮੌੜ 'ਤੇ ਨੇ ਆਉਂਦੀ ਹੈ। ਵਿਚ ਸੰਸਾਰ ਪੱਧਰ ਦੇ ਵੱਖੋ–ਵੱਖਰੇ ਸਾਹਿਤਕ ਝੁਕਾਅ ਆਪਣੀ–ਆਪਣੀ ਵਿਸ਼ੇਸ਼ ਵਿਕਾਸ ਪੜਾਵਾਂ ਵਿਚੋਂ ਗੁਜ਼ਰਦਾ ਹੋਇਆ ਪੰਜਵੀਂ ਪੀੜ੍ਹੀ ਵਿਚ ਪ੍ਰਵੇਸ਼ ਕਰ ਚੁੱਕਿਆ ਲਗਭਗ ਇਕ ਸਦੀ ਪਹਿਲਾਂ ਸ਼ੁਰੂ ਹੋਇਆ ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਨਾਟਕ ਕਈ

·भिन्निटेट बुंदेसन, धनावी बिझात, श्रीमाजी बालस, बस्तुका

ਅਸਲ ਵਿਚ ਬੀਏਟਰ ਦੀ ਯਥਾਰਥਵਾਦੀ ਧਾਰਾ ਦਾ ਸਿਹਰਾ ਹੈਨਰਿਕ ਇਬਸਨ ਨੂੰ ਜਾਂਦਾ ਹੈ। ਪੱਛਮ ਦੇ ਬਹੁਤ ਸਾਰੇ ਵਿਦਵਾਨ ਪ੍ਰਤੱਖ ਤੌਰ 'ਤੇ ਇਹ ਸਵੀਕਾਰ ਕਰਦੇ ਹਨ। David Daiches tells, 'Henrik Ibsen (1828-1906) is considered to be the father of modern realistic drama. His plays attacked societies values and dealt with unconventional subjects within the form of the well-made play.'

ਤੌਰ 'ਤੇ ਨਿਮਨ-ਕਿਸਾਨੀ, ਕਿਵਤੀ ਵਰਗ ਦੇ ਸਮਾਜਿਕ, ਆਵਾਵਕ ਅਤੇ ਤਾਂ 'Realism in drama occurs when a play resembles real life, such ਮਹਾਨਕਰਾਂ ਦੇ ਵੀਏਟਰ ਵੇਂ ਸਮਾਨਾਂਤਰ ਹੀ ਵਿਕਸਿਰ ਹੁੰਦੀ ਹੈ। ਰੰਗਮੰਗ ਲਈ ਸਰਕਾਰਮ ਹੋ ਜਾਂਦੇ ਹਨ। ਘੜ੍ਹ ਕੰਗਮੰਜ਼ ਦੀ ਇਹ ਧਾਰਾ ਨਵਵਾਂ ਅਤੇ ਨਾਟਕ ਦੇ ਰੂਪ ਵਿਚ ਆਉਂਦੇ ਹਨ। ਇਸ ਦੇ ਸਮਾਰਾਤਰ ਪ੍ਰੋ. ਅਜਮੇਰ ਜਿੰਘ ਪੰਤ ਨਾਟਕ ਇੱਕ ਹਵੇਂ ਮੌੜ 'ਤੇ ਆਉਂਦਾ ਹੈ। ਇਸ ਲਈ ਜਿਵੇਂ ਜੁਰਖ਼ਹਨ ਸਿੰਘ ਨੁੱਖੜ ਦਾ ਅਧਣਾ ਵਿਲੰਘਣ ਮੁਹਾਂਦਵਾ ਸਿਰਜਵਾ ਹੈ। ਕਲਾਂ ਤੇ ਜੰਗਵ ਪੰਜ ਵੀ ਪੰਜਾਬੀ ਐਲਖ ਆਪਣੇ ਬੀਏਟਰ ਵਿਚ ਨਘੂ ਨਾਟਕੀ ਪ੍ਰਯੋਗ ਬਰਦਾ ਹੋਇਆ ਪੈਂਡ ਰੈਗਮੈਂਦ ਨਾਟਕ ਤੇ ਰੰਗਮੈਂਚ ਦੀ ਪਿੰਡ-ਪਿੰਡ ਤਕ ਪਹੁੰਚ ਗਏ ਜਾਂਦੀ ਹੈ। ਅਜਮੇਤ ਸਿੰਘ ਆਪਣੀ ਵਿਸ਼ੇਸ਼ ਹੋਂਦ ਕਾਇਮ ਕਰਦੇ ਹਨ ਜਿਸ ਵਾਹੀਂ ਪਹਿਲੇ ਵਾਵ ਪੰਜਾਬੀ ਰੂਪਗਤ ਦ੍ਰਿਸ਼ਟੀ ਤੋਂ ਵੀ ਜੋ ਅਸੀਂ ਵਿਚਾਵੀਏ ਤਾਂ ਇਸ ਵੱਕ ਵਿਚ ਨਾਮੂ ਨਾਟਕ ਅੱਲਖ ਦੁਆਰਾ ਰਚਿਤ ਪੇਂਡੂ ਯਥਾਰਥ ਦੀ ਪੇਸ਼ਕਾਰੀ ਕਰਦੇ ਨਾਟਕ ਅੱਤ ਕਿਵਾਨੀ ਅਤੇ ਸਿੰਘ ਔਲਖ ਦੇ ਪੰਜਾਬੀ ਨਾਟਕ ਜਗਤ ਵਿਚ ਪ੍ਰਵੇਸ਼ ਨਾਲ ਹੁੰਦਾ ਹੈ। ਪੜਿਲੀ ਵਾਰ ਸੱਭਿਆਚਾਰਕ ਯਥਾਰਥ ਦੀ ਪੇਸ਼ਕਾਰੀ ਹੈ, ਪ੍ਰਮੁੱਖ ਭੂਪ ਵਿਚ ਸਵਾਪਿਤ ਹੋਵਾ ਹੈ। ਯਥਾਰਥ ਦੇ ਨਾਲ-ਨਾਲ ਹੀ ਇਕ ਹੋਵ ਸਮਾਜਿਕ-ਯਵਾਰਵ, ਜਿਹਤਾ ਕਿ ਵਿਸ਼ੇਵ ਪ੍ਰਵੇਸ਼ ਕਰਦਾ ਹੈ ਤਾਂ ਇਸ ਪੜਾਅ ਵਿਚ ਮੱਧਵਰਗੀ ਯਬਾਰਕ ਅਤੇ ਮਰਾਂਨਗਰੀ ਇਸੇ ਪ੍ਰਕਾਰ ਜਦੋਂ ਪੰਜਾਬੀ ਨਾਟਕ ਆਪਣੇ ਵਿਕਾਸ ਖੜਾਅ ਦੀ ਤੀਜੀ ਪੀਫ਼ੀ ਵਿਚ as showing political, social events that occur within a country." ਕਿਰਤਾਂ ਹੋਂਦ ਵਿਚ ਆਉਂਦੀਆਂ ਹਨ। ਜੇ ਯਥਾਰਬਵਾਦ ਬਾਰੇ ਚਰਚਾ ਛੋੜੀ ਜਾਵੇ 'ਬੇਗਾਨੇ ਬੋਹੜ ਦੀ ਛਾਂ' ਪੇਂਡੂ ਵੈਗਮੰਦ 'ਤੇ ਆਪਣੀ ਸ਼ਾਮ ਕਾਵਿਮ ਕਵੇਂਦੇ ਹਨ। ਇਸ ਪੇਂਡੂ ਸਮਾਜਿਕ-ਯਥਾਰਥ ਦਾ ਆਰੰਭ ਤੀਜੀ ਪੀਡੀ ਦੇ ਨਾਟਕਕਾਰ ਪ੍ਰੇ ਆਜ਼ੀਰ ਇਸੇ ਲਹਿਰ ਅਧੀਨ ਪੰਜਾਬੀ ਨਾਟਕ ਦੇ ਖੇਤਰ ਵਿਚ ਮੁੱਨਵਾਨ ਯਵਾਰਵਵਾਦੀ

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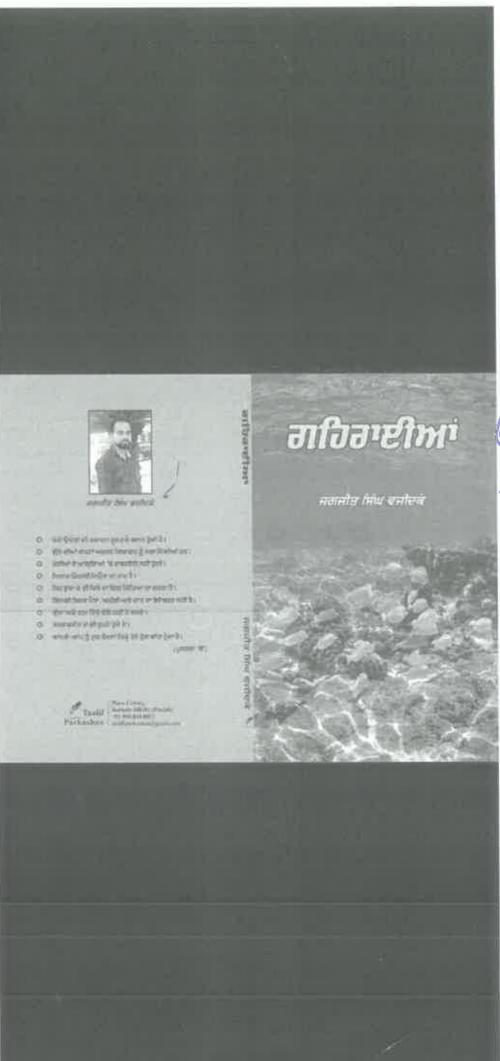
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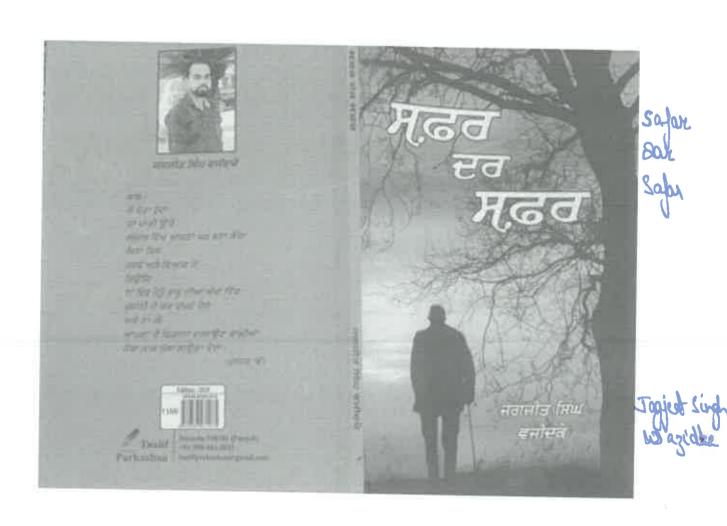
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SAFAR DAR SAFAR (Poems)

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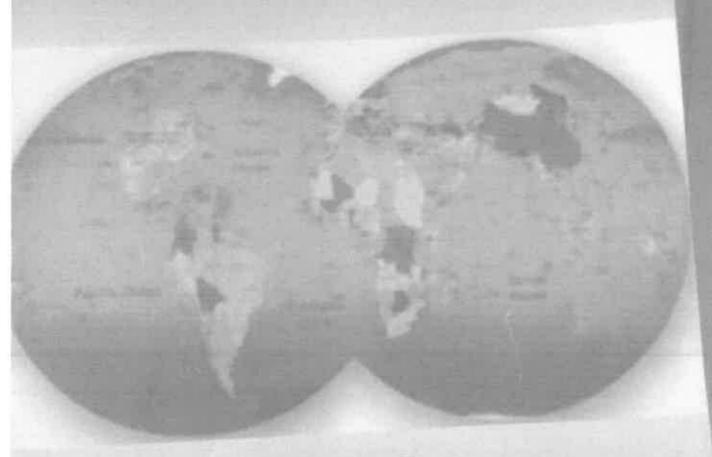
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Redefining Morals and Ethics-Towards Transformative Global Citizenship Education for the 21st Century



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ROLE OF ETHICS IN MODERN BUSINESS: AN IMPORTANT KEY ASPECT OF THE CONCERN

Swaran Singh Assistant Professor, SD College, Barnala, Punjab, India

Abstract

Business ethics simply we mean that the application of ethics in business. Earlier it was the opinion that a business cannot; Business others simply we mean that the application of others in instruction that they are, responsible for social welfare, once the others. This wond has been changed today. Today business has found out that they are, responsible for social responsibilities. otheral This need has been changed today. Today business has found of the concern, corporate social responsibility, corporate within a second structure. In this present globalised economy, corporate social responsibility, corporate and operate within a second structure. In this present globalised economy, corporate social responsibility, corporate social respon his and operate within a social structure. In this present grounds the concern, The study concentrates on how the mide envertance, eshical behaviour becomes the important key factors of the concern. The study concentrates on how the mide governance, ethical behaviour becomes the important key factors to the business. The article discusses the mister businesses are accelerated by applying the code of conduct in the environment of the business. The article discusses the survivo businesses are accelerated by applying the code of conduct in the kill the modern industries in achieving their targeted result in the present society. The results of this study would help the modern industries in achieving their targeted result in of modern in the present society. The results of this study within their practices and new business can comply with the result, for high per hymanes

Keywords, Business Ethics, Social Responsibility, I-thical Behaviour, Code of Conduct.

Same say knowledge is Power" I believe that actual power lies in the character of a person. Human and ethical value while has beneviting the Power I believe that nething but the degree of faith that one bestows upon oneself. Ethics is sorting but the degree of faith that one bestows upon oneself. Ethics is sorting to be wealth, of a character l'illust is nothing but the degree of faith that one bestows upon oneself. Ethics is sorting to be the a section of more discipling with what is right or wrong, good or bad, virtue or vice. Ethics is thus a science of morals and principle Meral principles are actions that carry the best consequences for everyone concerned. For instance, "Never break promise. "Treat every one fairly" and "Always tell the truth", Ethics refer to the code of conduct that guides an individual truth. in dealing with a situation. It relates to the social rules that influence people to be honest in dealing with other people.

the objectives of the ethics are to study human behaviours and make evaluative assessments about them as moral or impage and establish moral standards and norms of behaviour.

The three C's of business ethics:

- Compliance
- Contribution
- 3. Consequences

Purpose of the Study

The purpose of the study is to contribute to the understanding of business ethics and particularly it reflects the modern business practice with the application of code of conduct. The study concentrates on how the modern businesses are accelerated a applying others in the environment of the business. The study also focuses on why the modern business needs the applications ethics in their survival in the society.

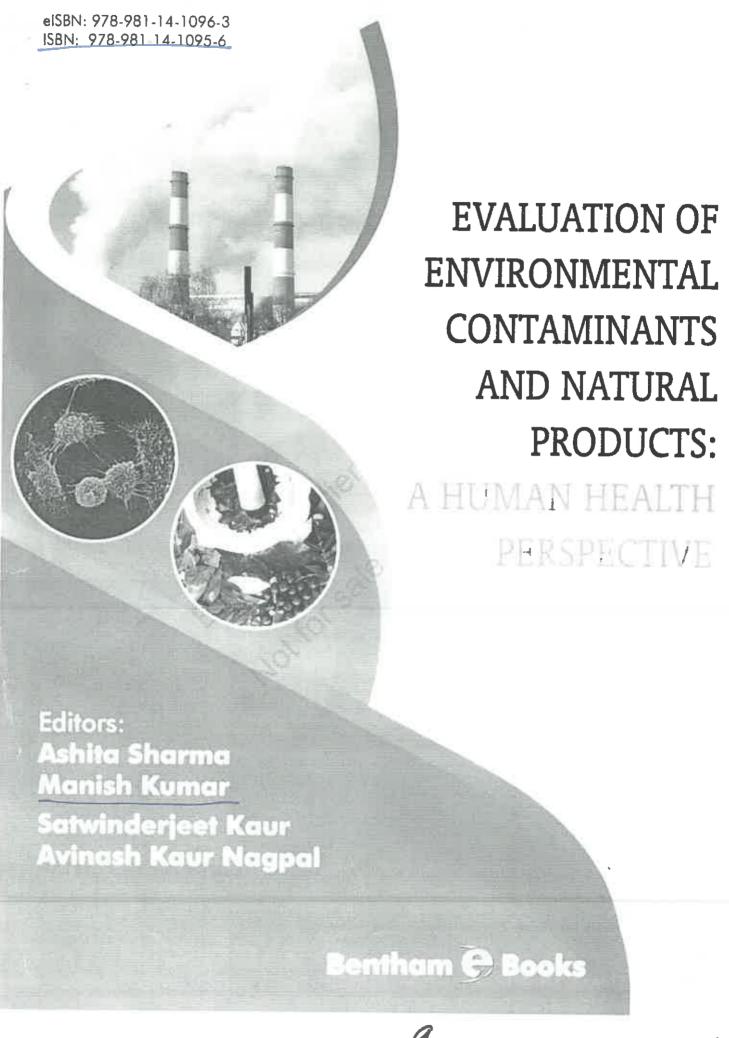
to meet the aim of the paper, a theoretical part will be presented in order to explain and point out the basic meaning, role at references of the business ethics, finding the information and theory from books as a references. Furthermore, also some reexamples about the business ethics is discussed.

Lthics Tools

- . CODE OF ETHICS:- In the later 1980s, the Conference Board of in New Delhi, a leading business members is pregammation, found that 76% of corporations that were surveyed had codes of ethics. Many ethicists note that it is if ocycloping and continuing dialogue around the code's values that is most important.
- #. CODES OF CONDUCT:- "Codes of conduct specify actions in the workplace and codes of ethics are general guide to decisions about those actions", explain Craig Nordlund, the Associate General Counsel and secretary at HP. He suggest that codes of conduct contain examples of appropriate behaviour to be meaningful.
- #. IMAINING:- All staff must be aware of and act in full accordance with policies and procedures (this is true, whether policies and procedures are for ethics programmes or personnel management). This full accordance require training abort policies and procedures. Orient new employees to the organisation's ethics programme during new-employee orientation

Why is fathics important?

- ETHIC'S CORRESPONDS TO BASIC HUMAN NEEDS:- Most top managers would like to respond to thi need of their employees; and managers themselves feel an equal need to be genuinely proud of the co. the) at directing. These basic ethical need compel the organisation to be ethically oriented.
- VALUES CREATE CREDITABILITY WITH THE PUBLIC:- There will be an instinctive prejudice ! (in) favour of its products, since people believe that the co. offers value for money, its public issues will attract " inunediate response.
- VALUES GIVE MANAGEMENT CREDITABILITY WITH EMPLOYEES :- Organisation ethics, who tiid perceived by employees as genuine, create common goals, values and language.



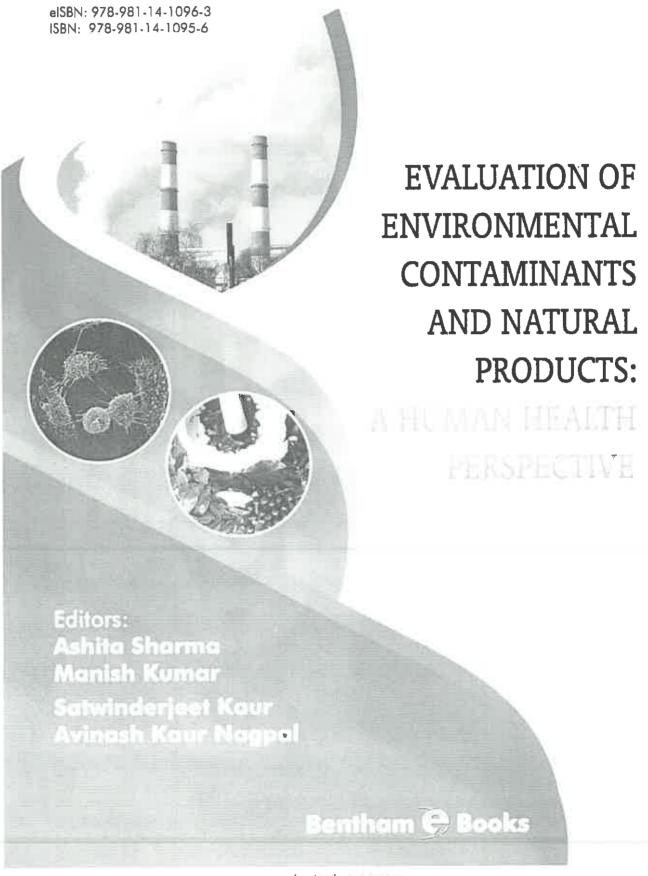
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Potential Health Benefits of Nutraceuticals for Human Health

Sandeep Kaur', Manish Kumar', Kritika Pandit', Ajay Kumar' and Satwinderjeet Kaur'.

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Department of Biology, S.D. College, Burnala, Punjab-148101, India.

Abstract: Nutraceuticals or functional food plays a key role in curbing the inception and etiology of several degenerative diseases and acts as a medicinal food with least side effects in comparison to other therapeutic agents and thereby successfully implemented in modern drug discovery. Global nutraceutical market was expected to rise by 67 billion US dollars approximately in 2016 which indicated surging demand for functional foods worldwide. The major nutraceuticals market includes supplements/medications, foods and functional beverages that provide mental acuity, energy and immunity of the individuals. This review focuses on the novel strategies that implemented the use of nutraceuticals for preventing and treating the diseases/disorders by avoiding unhealthy food and promoting the consumption of foods that go beyond basic nutrition. In the present review, we demonstrate the role of nutraceuticals in modulating certain physiological and pathophysiological processes which are involved in the development of human acute and chronic diseases.

Keywords: Acquired Immuno Deficiency Syndrome, Chronic Diseases, Chronic Mild Stress, Cancer, Flowers, Fruits, Functional Foods, Human Health, Human Immunodeficiency Virus, High Fat Diet, Medicinal Plants, Multi-Drug Resistant, Natural Sources, Nutraceuticals, Phytoconstituents, Protective Factors, Therapeutic Agents.

INTRODUCTION

The term "Nutraceutical" is a combination of two words 'nutrition' and 'pharmaceutical' which indicate a strong relationship between the nutrients and their use in therapeutic drugs [1, 2]. The Nutraceuticals industry of India is expected to rise by 2019-2020 at 20% to USD 6.1 billion due to awareness about

Ashita Sharma, Manish Kumar, Satwinderjeet Kaur & Avinash Kaur Nagpai (Eds.)
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Caspases and Phytochemicals: An Important Link in Cancer Chemoprevention

Manish Kumar¹, Sandeep Kaur², Varinder Kaur² and Satwinderjeet Kaur².*

Abstract: The use of natural phytochemicals over other treatment regimens offers a safe and broad-spectrum strategy to overcome the incidence of cancer. Phytochemicals play a pivotal role for the induction of apoptosis in cancerous cells by activation of pro-apoptotic proteins and initiator caspases that in turn cleave and execute the activation of down-stream effector caspases. The caspases belong to the family of proteases that exist as inactive pro-forms or zymogens that on cleavage forms an active enzyme mediating apoptosis. Since cancer cells become insensitive to anti-growth and apoptotic signals, thus these caspases remain inactive in them. Array of phytochemicals belonging to different categories vic. phenols, flavonoids, terpenoids, alkaloids, stilbenes elc. are reported to trigger the activation of caspases in cancer cells by modulating various cell-death stimulating pathways. In the present review, we highlighted the role of different phytochemicals that execute the cleavage of caspases in cancerous cells by activating pro-apoptotic enzymes and proteins involved in the induction of apoptosis. This will assist to select and identify the molecular mechanisms of some effective phytochemicals targeting caspases in their chemopreventive ability.

Keywords: Alkaloids, Apoptosis, Bcl-2 Family, Cancer, Caspases, Chemoprevention, Cytoplasmic Proteins, Cysteinyl Specific Proteases, Effector Caspases, Epigenetic, Extrinsic Pathway, Flavonoids, Initiator Caspases, Intrinsic Pathway, Nuclear Proteins, Phenols, Stilbenes, Terpenoids, Phytoconstituents, Zymogens.

INTRODUCTION

Cancer is a multi-stage patho-physiological condition occurring in response to genetic alteration, immune suppression and malignant transformation and comprises of 3 main phases viz. initiation, promotion and progression [1, 2]. It is typified by altered or dys-regulated cellular processes such as proliferation,

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Pollutants and Protectants **Evaluation and Assessment Techniques**

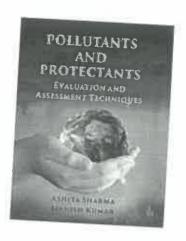
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Reference Book



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About the Book

Advances in technological developments have led to increase in buildup of pollutants in surrounding environment. Increase in concentration of pollutants due to ill planned anthropogenic activities has created a situation of a serious concern for human race. The present book addresses the issues related to increase in concentration of pollutants in biosphere, protocols to assess the toxicity of pollutants and how it can affect human race. It also summarizes some protective agents present in the form of natural products which can protect us from the harmful effects of these pollutants. The first chapter of the book focuses on carcinogenicity of environmental pollutants. Next four chapters are focused on specific emerging pollutants which have increased in concentration due to anthropogenic activities. These are followed by couple of chapters focusing on the analytical aspects and various techniques and bioassays that can be used to estimate the toxic effects of these pollutants. In the last three chapters of book authors have tried to compile information available regarding the phytochemicals which can have protective effects against the

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- 3. Phthalates (Emerging Environmental Pollutants): Sources, Fate and Their Toxicological
- 4. Dioxins and Dioxin-like Compounds (DLCs)
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- 7. Recent Advances in Analytical Methods for Detection of Pesticides



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- 9. Bioprospecting Endophytic Actinobacteria of Medicinal Plants as Potential Anticancer Therapeutic Agents
- Unravelling the Role of Chemopreventive Agents as Modulators of Carcinogenesis Index

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Audience: M.Sc students or researchers

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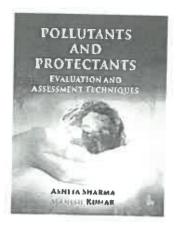
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Dr. Ashita Sharma is Associate Professor of Environmental Sciences at Chandigarh University, Gharuan, Mohali, India. She obtained her M.Sc. (Hons.) and PhD in Environmental Sciences from Guru Nanak Dev University, Amritsar, India. Dr. Sharma has qualified UGC-NET and has over 6 years of teaching experience and 7 years of research. Her areas of interest include soil remediation, environmental genotoxicity carcinogenicity and biomonitoring. During her research, she published many articles in journals and books of international repute. She is currently guiding graduate and doctorate students. Also, she is a member of various professional bodies and is also acknowledged for reviewing articles for journal like *Chemosphere*.

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CHAPTER 8

Phytochemicals from Medicinal Plants as Potential Antimutagenic/Antigenotoxic Agents

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ABSTRACT

Plethora of environmental mutagens and genotoxins are prevalent in our environmental surroundings which are posing threat to human health. Entry of these substances in the living cells may lead to the formation of DNA adducts, DNA reactive by-products and production of various reactive species which may cause mutations and defects in the cellular repair systems leading to chemical carcinogenesis. Alternatively, plant-based natural products have shown to exhibit counteracting effects on these mutagens and carcinogens via interfering with their uptake and metabolism. Routinely, varieties of bacterial, plant and animal-based bioassays are being used for assessing the antimutagenic/antigenotoxic effects of phytoconstituents. The most common assays are Ames assay, SOS chromotest, Comet assay, Allium cepa/Vicia faba root chromosomal assay, micronucleus assay, etc. In the present chapter, we have discussed and emphasized the role of diverse assay/test systems which are being employed for evaluation of antimutagenic/antigenotoxic activities.

Keywords: Mutagens, Genotoxins, Bioassays, Medicinal plants, Antimutagenic, Antigenotoxic

INTRODUCTION

Cancer, a clear threat to human health, is a multistep process that occurs as an outcome of various factors such as oxidative stress, mutagenesis, epigenetic and immune deregulation, persistent inflammation, etc. and its hallmarks comprise unregulated metabolic and signaling pathways, genomic instability, anti-apoptosis and unregulated cell proliferation, establishment of neoplastic lesions and



CHAPTER 10

Unravelling the Role of Chemopreventive Agents as Modulators of Carcinogenesis

Sandeep Kaur^{1,2}, Paramjeet Kaur², Varinder Kaur¹, Harsimran Kaur¹, Manish Kumar², Kritika Pandit¹, Ajay Kumar² and Satwinderjeet Kaur¹*

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ABSTRACT

Carcinogenesis or tumorigenesis is a multistep process involving dysregulation in the basic cell functioning which is primarily induced by careinogens owning to the initiation and development of cancer. Environmental exposures, lifestyle choices, infectious agents and inherited mutations are the major causative factors of cancer. Cancer is a major health burden that is diagnosed with 5,85,000 deaths and 1.6 million new cancer cases in the United States in 2014. For the past few decades, there was significant improvement in the treatment of cancer with more effective drugs but identified with unwanted side effects and poor prognosis. However, lack of success with the targeted therapies has led to the adoption of an alternative approach which is safe and avoids the expensive treatment options. Extensive research and advancement in the field of molecular biology has identified the various chemopreventive agents which provide a large benefit to healthcare providers and thereby halt and prevent the incidence of cancer. Cancer chemoprevention is the use of synthetic, natural and biological agents to reverse, delay, inhibit and prevent the inception and progression of carcinogenesis. Numerous evidences have revealed that the phytochemicals derived from natural products are considered more pronusing due to their higher efficacy in reducing the risk of acquiring cancer. Cancer chemopreventive agents are further divided into various categories according to their effects on different carcinogenesis stages like the compounds which influence the initiation of cancer are blocking agents and the ones that effect the promotion and progression are suppressing agents. These chemopreventive

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Applications of GIS in Management of Water Resources to Attain Zero Hunger



Ashita Sharma, Manish Kumar and Nitasha Hasteer

Abstract The sustainable development goals as proposed by United Nations give huge importance to ending hunger and attaining food security for all by 2030. According to World Health Organization (WHO), food security can be achieved if everyone has access to sufficient, safe and nutritious food throughout the year. Every one in nine persons is deprived of sufficient and safe food. To meet the growing population demand, United Nations aims to double the productivity in agriculture by 2030. Though, by 2015 there is around 10% reduction in critically hungry population of world, yet, the food security for all is a far-sighted dream. Crunch of land and water resources is posing the biggest threat in meeting this target. Per capita availability of land has been decreased with the increase in population, and the water resources are either unavailable or polluted. For sustainable agriculture, there is a need to identify and map locations having adequate water and land resources. GIS models help in analyzing ground profiles, soil water content, rainfall patterns, and geographical terrain and crop conditions. Thus, GIS technologies can help in developing models for water resource management. Continuous monitoring and assessment of natural water resources can help in capacity building, mapping and/or monitoring of cultivable land. Advances in GIS technologies could be an efficient tool to achieve the "zero hunger" goal. The present chapter covers various developments in GIS for water resource modeling across the globe.

Authors have contributed equally to the chapter.

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of International Union of Crystallography (IUCr). He is also recipient of ITG by CSIR and DST. He has visited DESY (Germany), Boston University (USA), PAL (South Dr. SINGH was born on 31 December 1983 in Siwan, Bihar and did Ph.D in Physics from Jiwaji University, Gwalior in 2014. He received Young Scientist Award Korea)



Physical Properties of YbN, YbP and YbAs Compound Theoretical Study of

Structural, Electronic, Magnetic and Thermal Properties of YbN, YbP and YbAs Compounds



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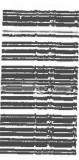
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High Pressure Properties of Lutetium Monopnictides (LuX, X = N, P, As)

structural, electronic, phase tractucin, investigated and expresented the heavest farithands compounds (LuX X = N P As) vz. Intertum intride (LuN), lutetum phosphide (LuP) and lutetum arst-inde (LuAs) vz. Intertum intride ab-indic calculations based on the density functional theory (DFT) in the subsequent section crystal structure, symmetry, and space group followed by a brief discussion of rare-earth ions. Survey of the literature on the theoretical and experimental work already available on related compounds are done. The relative stabilities of LuXat high pressures in the NaCl (B1). CSCl (B2) and blende (B3), and body-centered structural transition from B1 to B2 and BCT phase under compression. The computed values of a B0, B0. E0 and PT are obtained to Luzioratural values of a B0, B0. E0 and PT are obtained to Luzioratural expansion coefficient, bulk medulus, specific heat and entropy have been studied at high temperature and high pressure.



Dr. SANJAY KUMAR SINGH was born in 1983 in Siwan, Bihar, India and did Ph.D in Physics from Jiwaji University, Gwalior in 2014. He received many award i.e Young Scientist Award of International Union of Crystallography (IUCr). He is also recipient of ITG by CSIR and DST. He has visited DESY (Germany), Boston University (USA), PAL (South Korea).



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Sanjay Kumar Singh U. P. VERMA

High Pressure Properties of Lutetium Monophictides (LuX, X = N, P, As)

Theoretical Study at High Pressure : Phase Transition, Electronic and Thermal Properties of LuN, LuP and LuAs Compounds

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(Pahu Phutale De Sukhan) Jaspreet Sidhu





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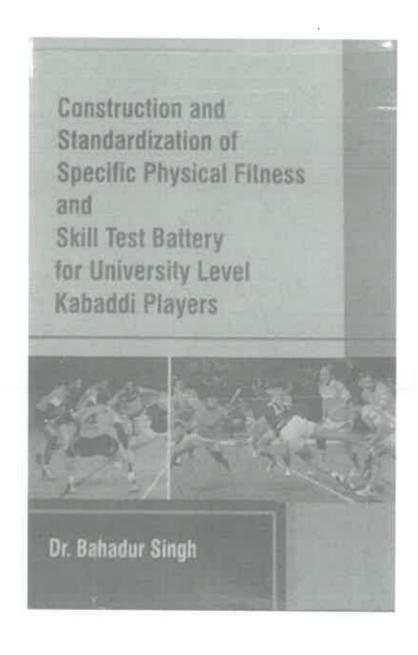
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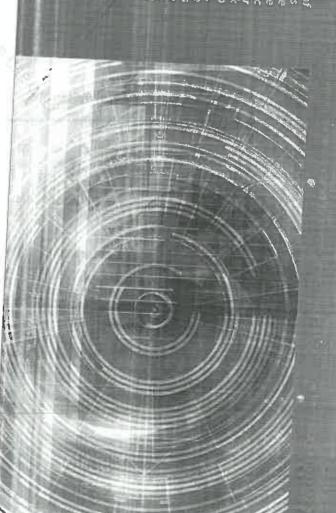
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Dr. SANJAY KUMAR SINGH currently working as a Assistant Professor (Physics) in S. D. College, Barnala, Punjab and has been published two books in LAP & Scholar Press. He received many award i.e Young Scientist Award of IUCr. He is also recipient of ITG by CSIR and DST. He has visited DESY (Germany), Boston University U.S.A and PAL, South Korea.



Sanjay Kumar Singh

High Pressure Phase Transition Properties of Neodymium Monopnictides

Structural, Electronic & Phase Transition Properties of NdP, NdAs and NdSb Compounds : A full Potential Approach



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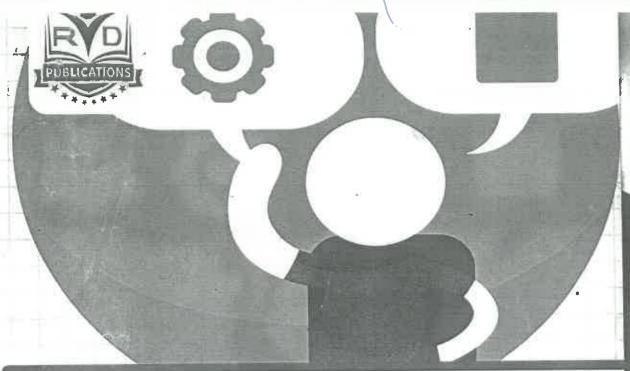
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Evaluating the Correlation between occupational stress and job satisfaction among healthcare employees: A case study of government hospitals in Punjab

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IK Gujral Punjab Technical
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ABSTRACT

The present study occupational stress and job satisfaction among healthcare professionals in government hospitals in Punjab focuses on the present scenario of healthcare professionals. The study is conducted on a sample of 200 (doctors, staff nurses, pharmacists and laboratory technicians) each. The data collected using questionnaires Occupational stress index and Job satisfaction scale by J.S Spector. The results of this study show that significant positive correlation exists occupational stress sub-scales and job satisfaction dimensions among doctors, staff nurses, pharmacists and medical laboratory technicians. The further research can be done on large sample of healthcare employees. The limitation of the study is sample size due to time constraint. The research is conducted is a effort to know about the real situation of healthcare employees, so the required steps should be taken by the Government to improve the working conditions, pay, promotion, conditions, factors etc.

Keywords

Occupational stress, job satisfaction, healthcare employees, correlation.

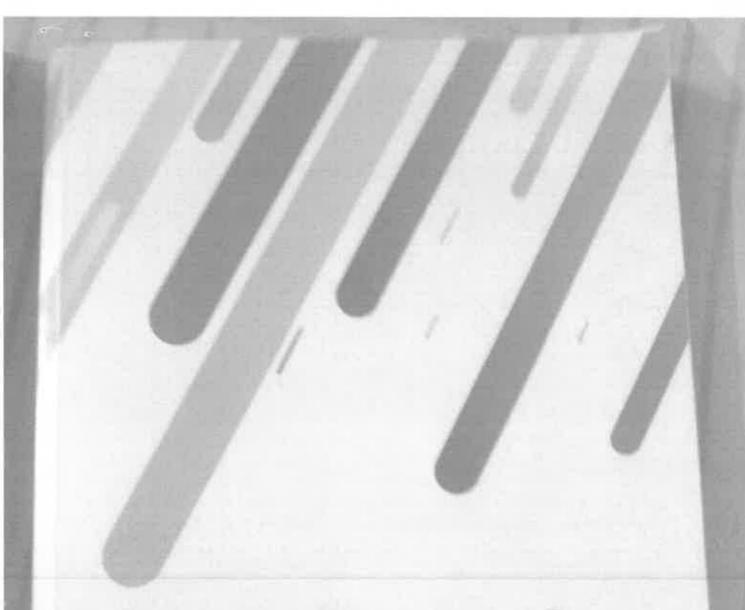
1. INTRODUCTION

From the past decades, the stress impacted on the job satisfaction in many dimensions. There is change in the nature of the work in the several sections of industry. In the present arena the modern organisations give much importance to job stress and job satisfaction factors. 1 According to the recent studies, there is difference between employees capabilities, resources, needs to mismatch in human. These factors makes stress harmful due to physical and emotional mismatch 2. From the different report researchers the researcher opinion that work factors causes stress among workers 3. These workrelated stress factors divided into physical and psychological hazards. Anxiety and work related stress division by physical hazards in the work place. Psychological hazards in the work design, organisation structure and togetherness are negative effects on workplace workers 4. Due to occupational the problems associated with mental and physical behavioural problems in workers as well as job satisfaction organisation commitment 5. Different research indicates that correlations between workplace stress and job satisfaction. Due to high stress in the organisation there is low level of job satisfaction. Job stressors are main reason of low job satisfaction and labour turnover 6. Job satisfaction is a perception of an employee towards his/her job. It is considered as an overall feeling in which attitudes dimensions of employee with his/her job 7. There are sufficient evidence are available that the indicators rising work stress detoriate the mental and

physical health of the employees 8. Job satisfaction disposition includes two dimensions positive and negative affecting distress, nervousness and repulsive involvement. Positive involvement includes pleasurable involvement and high emerge shows positive affecting 9. Work stress is main factor of job satisfaction. Work stress is motivator, creating and job satisfaction reduces bordom and increases job satisfaction. On negative side of stress leads to anxiety, depression and reduces job satisfaction 10. According to the American institute of stress is main cause of 40percent injuries in workplace and 60 percent problems associated with work in organisation 11. According to the study 1.1 million people loose thir jobs due to workplace issues are job stress 12.

2. LITERATURE REVIEW

In his research on different employees of private hospitals find that the influence of emotional labour on job satisfaction. There is significant influence of emotional labour on job satisfaction of the employees in selected hospitals in Punjab. Emotional labour was negatively related with job satisfaction. The dimensions of emotional labour deep activity and emotional consonance are major cause of job satisfaction 13. In his research on 353 physicians in Dubai the determinants of workplace stress among healthcare professionals in stress among physician is associated with socio demographic factors. The stress can be reduced through developing stress management techniques and administrative program at the workplace 14 . in his research on 271 nurses operating in Greek hospitals found that the stress factors conflict, heavy workload and lack of job autonomy are negatively with all job satisfaction dimensions. The dimension shortage in information access and feedback is positively related to employee satisfaction with rewards and severity 15. In his research on organisation commitment and job satisfaction among nurses in Serbia on 1337 nurses found that main factors of job satisfaction and organisation and organisation commitment of nurses effect the organisation commitment and job satisfaction of nurses 16. Research factors affecting job and career satisfaction among community pharmacists found that job and career positive sign of influenced by extrinsic factors 17. Job satisfaction among doctors working at teaching hospitals of Bahawalpur 244 doctors shows out of 244 the 60 doctors showed 56 percent doctors dissatisfaction with their level of income 92 percent salary structure 18. Job satisfaction of reforms in a typical hospital in Estonia to know about level of job satisfaction among the staff Estonian hospital planning communication, plans, quality of services are positively correlated with job satisfaction stress levels are negatively correlated with the job satisfaction 19.



Emerging Business Ideas-

An Insight into Skills & Innovations

Editor

Dr. Harpreet Singh

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IMPACT OF INFORMATION SYSTEM (IS) ON BUSINESS EFFECTIVENESS

Swaran Singh

SD College, Barnala

INTRODUCTION: FOUNDATION COCEPTS

The question of why we need to study IS and IT has evolved into a moot issue. IS have become as integrated into our daily business activities as accounting, finance, operation management, marketing, human resource mgt, or any other major business function. IS and technology are vital components of successful businesses and org some would say they are business imperatives. They thus constitute an essential field of study in business administration and management, which is why most business majors include a course in IS. Since you probably intend to be a manager, entrepreneur, or business professional, it is just as important to have a basic understanding of IS as it is to understand any other functional area in business. IT, including internet-based IS, are playing vital and expanding roles in business. IT can help all kinds of business improve the efficiency and effectiveness of their business processes, managerial decision making, and workgroup collaboration, which strengthens their competitive positions in rapidly changing marketplaces. IT and systems are, quite simply, an essential ingredient for business success in today's dynamic global environment.

OBJECTIVES

- 1. To study the relationship between various components of Information system.
- 2. To study the impact of Information System among the Information system users.
- 3. To analyze the impact of Information system on the business process and the organizational performance.

RESEARCH METHODOLOGY

This present study attempts to study the impact of information system (IS) on business effectiveness. The necessary data were collected through secondary data.

WHAT IS AN INFORMATION SYSTEM (IS)

An IS can be any org combination of people, hardware, software, communications networks, data resources, and policies and procedures that stores, retrieves, transforms, and disseminates information in an org people rely on modern IS to communicate with one another using a variety of physical devices, information processing instructions and procedures communications channels, and stored data. A highly interactive system that provides managers and executive flexible access to internal and external information for monitoring operation results and general business conditions. IS designed to facilitate the sharing of knowledge rather than just information.

THE FUNDAMENTAL ROLES OF INFORMATION SYSTEM IN BUSINESS

- Support of business processes and operations.
- Support of decision making by employees and managers.
- Support of strategies for competitive advantage.

THE IMPACT OF INFORMATION SYSTEM ON ORGANISATIONAL PERFORMANCE

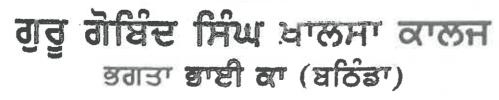
A key factor for high returns from IT investment is the effective utilization of information to improve org performance. Some of the possible reasons are given below:

- SHIFT OF IT APPLICATIONS: IT applications have shifted from just automation to IT acting as a business
 enabler and thus becoming more and more a part of org strategy. Automation yields measurable benefit in terms
 of cost saving and IT cost of automation is not a substantial amount, where as strategic IT investment is possible if
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0 Author

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ਗੁਰੂ ਨਾਨਕ ਬਾਣੀ ਦੀ ਭਾਸ਼ਾ: 'ਆਸਾਂ ਦੀ ਵਾਰ' ਦੇ ਸੰਦਰਭ ਵਿੱਚ

थे. उक्शेड मिर्राट

Porof. Har breet Sujo ਭਾਸ਼ਾ ਦੀ ਨਿਰੁਕਤੀ ਸੰਸਕ੍ਰਿਤ 'ਭਾਸ਼' ਧਾਤੂ ਤੋਂ ਹੋਈ 👣 'ਭਾਸ਼' ਧਾਤੂ ਦਾ ਅਰਥ ਹੈ ਬੋਲਣਾ। ਭਾਸ਼ਾ ਨੂੰ ਉਰਦੂ-ਫਾਰਸੀ ਵਿੱਚ 'ਜ਼ਬਾਨ' ਅਤੇ ਅਰਬੀ ਵਿਚ 'ਲਿਸਾਨ' ਆਖਦੇ ਹਨ। ਜ਼ੁਬਾਨ ਤੇ ਲਿਸਾਨ ਵੀ ਸਾਡੀ ਕਰਮ ਇੰਦਰੀ ਜੀਭ ਵੱਲ ਹੀ ਇਸ਼ਾਰਾ ਕਰਦੇ ਹਨ ਕਿਉਂਕਿ ਭਾਸ਼ਾ ਸਾਡੀ ਜੀਭ ਦੀ ਸਹਾਇਤਾ ਨਾਲ ਬੋਲੀ ਜਾਂਦੀ ਹੈ। ਅੰਗਰੇਜ਼ੀ ਵਿਚ ਇਸੇ ਤਰ੍ਹਾਂ ਦਾ ਸ਼ਬਦ Tongue ਹੈ। ਇਸ ਦੇ ਅਰਥ ਵੀ ਜੀਭ ਹਨ। ਲਾਤੀਨੀ ਲਿੰਗੂਆ ਦਾ ਅਰਥ ਵੀ ਜੀਭ ਹੈ। ਲਿੰਗੂਆ ਤੋਂ ਹੀ ਲੈਂਗੂਏਜ ਬਣਿਆ ਹੈ। ਵੱਖ–ਵੱਖ ਭਾਸ਼ਾ ਵਿਗਿਆਨੀਆਂ ਨੇ ਵੀ ਭਾਸ਼ਾ ਨੂੰ ਪਰਿਭਾਸ਼ਤ ਕਰਨ ਦਾ ਯਤਨ ਕੀਤਾ ਹੈ।

ਸੋਸਿਊਰ ਅਨੁਸਾਰ—ਭਾਸ਼ਾ ਚਿੰਨ੍ਹਾਂ ਦੀ ਪ੍ਰਣਾਲੀ ਹੈ।" ਮਾਲਮਬਰਗ ਅਨੁਸਾਰ-ਭਾਸ਼ਾ ਇਕ ਸੰਚਾਰ-ਪ੍ਰਬੰਧ ਹੈ। ਨੌਮ ਚੌਮਸਕੀ ਅਨੁਸਾਰ—"ਭਾਸ਼ਾ ਵਾਕਾਂ ਦਾ ਸਮੂਹ ਹੈ।"।

ਇਸ ਤਰ੍ਹਾਂ ਭਾਸ਼ਾ ਦਾ ਮੂਲ ਧਰਮ ਸੰਚਾਰ ਕਰਨਾ ਹੈ। ਸਾਹਿਤ ਇਕ ਸ਼ਾਬਦਿਕ ਕਲਾ ਹੈ, ਭਾਸ਼ਾ ਤੋਂ ਬਿਨਾ ਸਾਹਿਤ ਦੀ ਸਿਰਜਨਾ ਸੰਭਵ ਨਹੀਂ। ਭਾਸ਼ਾ ਮੌਖਿਕ ਤੇ ਲਿਖਤ ਦੋਵਾਂ ਰੂਪਾਂ ਨਾਲ ਸੰਚਾਰ ਕਰਦੀ ਹੈ। ਆਮ ਬੋਲ-ਚਾਲ ਦੀ ਭਾਸ਼ਾ ਕੇਵਲ ਸੰਚਾਰ ਜੁਗਤ ਹੁੰਦੀ ਹੈ, ਜਦੋਂ ਕਿ ਸਾਹਿਤਕ ਭਾਸ਼ਾ ਸੁਹਜਮੁਖ ਜੇਕਰ ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਦੀ ਗੱਲ ਕਰੀਏ ਤਾਂ ਇਸ ਨੇ ਵੈਦਿਕ ਕਾਲ ਤੋਂ ਲੈ ਕੇ ਆਧੁਨਿਕ ਕਾਲ ਤੱਕ ਬਹੁਤ ਸਫ਼ਰ ਤੈਅ ਕੀਤਾ ਹੈ। ਆਦਿ ਕਾਲ ਵਿਚ ਰਚਿਆ ਗਿਆ ਸਾਹਿਤ ਜਿਸ ਨੂੰ ਗੋਰਖ ਨਾਥ, ਚਰਪਟ ਨਾਥ, ਚੌਰੰਗੀ ਨਾਥ ਆਦਿ ਨੇ ਕਲਮਰੂਪ ਕੀਤਾ, ਜਿਸਦੀ ਮੁਖ ਭਾਸ਼ਾ ਅਪਭ੍ਰੰਸ਼ ਪ੍ਰਧਾਨ ਸਧੂਕੜੀ ਹੈ।

ਪੰਜਾਬੀ ਸਾਹਿਤ ਦੇ ਮੱਧਕਾਲ ਨੂੰ ਇੱਕ ਸੁਨਿਹਰੀ ਯੁੱਗ ਵਜੋਂ ਜਾਣਿਆ ਜਾਂਦਾ ਹੈ, ਇਸ ਕਾਲ ਵਿਚ ਚਾਰ ਮੁੱਖ ਕਾਵਿਕ ਧਾਰਾਵਾਂ ਵਿਕਾਸ਼-ਕਰਦੀਆਂ ਹਨ, ਗੁਰਮਿਤ,

ਸਹਾਇਕ ਪ੍ਰੋਫੈਸਰ, ਵਿਭਾਗ – ਪੰਜਾਬੀ, ਜੰਗਡਾ, ਕਾਰਜ, ਕਰਜਾਲ।

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Manish Kumar Ashita Sharma Praveen Kumar *Editors*

Pharmacotherapeutic Botanicals for Cancer Chemoprevention



Editors Manish Kumar SD College Barnala, Punjab, India

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Praveen Kumar Technion - Israel Institute of Technology Technion City, Haifa, Israel

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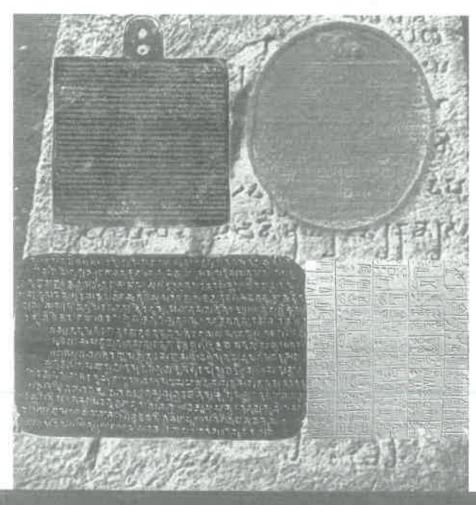
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LAND GRANTS IN EARLY MEDIEVAL NORTH INDIA

A Socio-Economic Analysis



ATLANTIC

Manjeet Singh



IN EARLY MEDIEVAL NORTH INDIA

A Socio-Economic Analysis

Land Grants in Early Medieval North India: A Socio-Economic Analysis is an attempt to make a thorough study to fill in the gaps of the previous studies into land grants where primary sources were less revoked. It discusses the Early Medieval Northern Indian Socio-Economic formation which was marked by a grossly unequal distribution of land rights. It also deals with the historical background of the land grants, which provides an insight into the events that led to Early Medieval North Indian social and economic crises. It throws the light on the peasantry as reflected in the land grant charters of the Early Medieval Northern India. It also throws some fresh light on the economic and social aspects of feudalism.

Dr. Manjeet Singh, M.A., M.Phil., Ph.D., UGC-NET, is an Assistant Professor of History at S.D. College, Barnala, Punjab. His authored books include *Mauryan India as Reflected in Indica of Megasthenes: An Historical Overview.* Presently, he is working on Epigraphical Sources of Early Medieval Northern India.



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published in peer reviewed journals. It was my privilege that I of an amateur when I first started research under him. He is undoubtedly a distinguished scholar of Indian history, who has to his credit more than ten books and some fifty research papers could accomplish a research work under him. His words are my my dream of doing research in history. I had longed for this me to work hard but also watched my every step as I was more regard sits on the top of this list. He has constantly inspired moment when I could express my gratitude to such a worthy and discerning teacher and principled man. He not only inspired My esteemed reacher Prof. G.C. Chauhan's name for that guiding principle forever.

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Manjeet Singh

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Calculated Values of Jump Factor and Jump Ratios of Lanthanum Compounds in K Shell and L₁, L₂ and L₃ Subshells

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Abstract. Absorption jump factors and jump ratios parameters are required in many areas of industries. Lanthamum is utilized in picture industry and for studio lighting and projection. Due to this reason it is important to calculate the absorption jump factor (J) and jump ratios(r) of lanthamum compounds to explore the potential applications of these compounds. The jump factors and jump series have been calculated using mass attenuation coefficient. The theoretical values of mass attenuation coefficient were obtained by using WinXCom, based on the mixture rule. The jump ratios (r 1,2,3) and jump factors (J 1,2,3), of Lanthamum compounds have been calculated for the first time. These different compounds have different jump ratios and jump factors for Lanthamum compounds near edges. It is expected that mass attenuation coefficient for Lanthamum compounds will vary near edge. It is found value of jump ratios for K, L₁, L₂, L₃ vary from 1.653 to 5.853, vary from 1.069 to 1.153, vary from 1.2 to 1.351 and vary from 1.316 to 2.814 respectively. It is also seen that value of jump factor for K, L₁, L₂,L₃vary from 0.395 to 0.829, vary from 0.065 to 0.133, vary from 0.116 to 0.26 and vary from 0.240 to 0.647 respectively. No experimental or theoretical values of these parameters are available in literature for comparison.

Key words: Attenuation coefficient, jump ratio and jump factor.

INTRODUCTION

Absorption jump factors and jump ratios parameters are required in many areas of industries. Lanthanum is utilized in picture industry and for studio lighting and projection. Due to this reason it is important to calculate the absorption jump factor (J) and jump ratios (r) of lanthanum compounds. There are no studies available in the literature related to absorption jump factor and jump ratios of lanthanum compounds. The aim of the present study is to study these jump ratios and jump factors in compounds which have wide applications in industry and will help to analyse atomic model used by Hubbell [1].

Elements commonly utilized as targets in research have x ray peaks are in two groups, one at higher energy called the K-series and a lower energy is known as the L-series and further, the M- and N-series and occur same way for compounds also. The Siegbahn notation is used in X-ray spectrum analysis and to name these peaks. It was introduced by Manne Siegbahn [2] and It has been indicated by D. Coster and R. Kronig [3] that the non-radiative transition $L_1 \rightarrow L_3$ plays important role in explaining certain characteristics of X-ray spectra. In this case, L_1 and L_3 subshell play important role when the vacancy is filled by an electron from the upper subshell of the same shell. It is known that the primary vacancy subshell is created not lower than L_1 subshell since the K-shell does not have subshells. The primary vacancy could be filled with an electron from the L_3 subshell if vacancy is created in K shell.



Investigation of Gamma Ray and Fast Neutron Shielding Ability of Some Waste Glasses for Nuclear Waste Storage Facilities

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Abstract. In present communication, gamma and neutron shielding ability of CRT panel (CRT-P), CRT funnel (CRT-F), LCD, and commercial borosilicate (BS) waste glasses has been studied in terms of energy exposure build up factors and fast neutron removal cross-section. The energy exposure build up factors of aforesaid waste glasses for the energy range of 0.015 MeV to 15 MeV and for penetration depth upto 40 mfp have been calculated directly using simple Log Interpolation Method without using multistep G.P. fitting method. On the basis of obtained results, it has been reported that these waste glasses possess satisfactory shielding characteristics and can be used as aggregate for making high density concrete storage facilities for safe disposal of nuclear waste.

Keywords: Waste glasses, Exposure Build up factor, Fast neutron removal cross-section, Safe nuclear waste storage facilities

INTRODUCTION

Nuclear waste material is usually divided into two categories i.e High level and low level nuclear waste. Deep seated storage facilities are required for high level nuclear waste disposal, whereas, low level waste can be stored in surface storage sites. Nuclear radiations in the form of gamma rays, neutron flux and fission fragments are being continuously emitted from nuclear waste disposal sites due to inappropriate storage facilities in the vicinity of nuclear power plant. Since these radiations contain both gamma rays and neutron, therefore, nuclear waste disposal facilities should preferably be constructed with an appropriate material which can simultaneously absorb both gamma-ray and neutrons.

Waste glass can be found in many forms like CRT glass obtained from dismantled old TV sets and Computer monitor, LCD glass from dismantled flat screen plasma/LCD/LED display TV and mobile phone panels, commercial glass like borosilicate glass from broken chemical apparatus, pharmaceutical, etc. Disposal of such waste glasses in landfills increases sharply during the past decade due to advances in technology. Glass being amorphous and contains significant quantity of silicon, is therefore pozzolanic in nature and even possesses cementitious properties in powder form. Moreover, LCD and CRT panel glass contain lead oxide (0- 4 %) and relatively high lead oxide content (25-30%) is found in funnel glass, therefore, these waste glasses can be used as heavyweight aggregate for making thick wall concrete boxes for safe disposal of low level nuclear waste. Moreover, utilization of waste glasses as cementitious materials offers a better environmental and economical alternative other than disposal.

In practical shielding design calculation, the contribution of reduced energy scattered radiation in addition to uncollided photons reaching the point of interest (e.g human body) is often ignored which may results in significant error in calculating exact thickness required to absorb particular energy radiation. The most important correction factor which is used to adjust the result for the uncollided photon to include the contribution from scattered and subsidiary radiation is build up factor. It is defined as the ratio of detector response to the radiation at point of interest to detector response to the uncollided radiation at same point [1]. Hence, material with low value of build up

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ਰਹੱਸ ਤੇ ਸੂਹਜ ਦੀ ਅਗਾਂਹਵਧੂ ਕਵਿਤਾ

ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਕਵਿਤਾ ਦਾ ਆਰਭ 20ਵੀਂ ਸਦੀ ਦੇ ਮੁੱਢ ਤੋਂ ਹੀ ਅਸਲ ਵਿੱਚ ਹੋਂਦਾ ਹੈ। ਆਧੁਨਿਕ ਕਵਿਤਾ ਨੇ ਵੱਖੋ-ਵੱਖਰੀਆਂ ਧਾਰਾਵਾਂ ਵਿੱਚ ਪੰਜਾਬੀ ਸਾਹਿਤ ਨੂੰ ਬਿਹਤਰੀਨ ਕਵਿਤਾ ਪ੍ਰਦਾਨ ਕੀਤੀ ਹੈ। ਹਰ ਧਾਰਾ ਜਾਂ ਲਹਿਰ ਦੀ ਆਪਣੀ ਖਾਸ ਆਹਮੀਅਤ ਰਹੀ ਹੈ। ਜਿੱਥੇ **ਬੋਧਿਕ ਧਾਰਾਵਾਂ ਨੇ ਪੰਜਾਬੀ ਕਵਿਤਾ ਨੂੰ ਪ੍ਰਭਾ**ਵਿਤ ਕੀਤਾ ਹੈ, ਉੱਥੇ ਖੇਤਰੀ ਝੁਕਾਵਾਂ ਅਤੇ ਅੰਦੋਲਨਾਂ ਦਾ ਪ੍ਰਭਾਵ ਵੀ ਪੈਜਾਬੀ ਕਵਿਤਾ ਨੇ ਕਬੁਲਿਆ ਹੈ। ਆਧੁਨਿਕ ਕਾਵਿ ਮੁੱਖ ਰੂਪ ਵਿਚ ਧਰਮ ਨਿਰਪੇਖ ਸੋਚ ਲੈ ਕੇ ਮਾਨਵ ਕੇਂਦਰਤ ਹੈ। ਇਸ ਕਵਿਤਾ ਦੀਆਂ ਸਾਰੀਆਂ ਹੀ ਧਾਰਾਵਾਂ ਦਾ ਕੇਂਦਰ ਮਾਨਵ ਹੈ। ਮੱਧਕਾਨੀ ਕਾਵਿ ਵਿੱਚ ਮਨੁੱਖ ਵਿਅਕਤੀਗਤ, **ਧਾਰਮਿ**ਕ ਮੁਕਤੀ ਲਈ ਯਤਨਸ਼ੀਲ ਸੀ, ਜਦੋਂ ਕਿ ਆਧੁਨਿਕ ਕਾਵਿ ਵਿੱਚ ਮਨੁੱਖ ਵਿਅਕਤੀਗਤ ਆਰਥਿਕ ਤੇ **ਮਾਨਸਿਕ ਮੁਕਤੀ ਲਈ ਯਤ**ਨਸ਼ੀਲ ਹੋ ਜਾਂਦਾ ਹੈ। ਸਿਸਾਰਕ ਪੱਧਰ 'ਤੇ ਇਸੇ ਕਵਿਤਾ ਰਾਹੀਂ ਸਮਾਜਿਕ ਚੇਤਨਾ ਦਾ ਦੌਰ ਵੀ ਆਰਡ ਹੈਵਾ ਹੈ। ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਕਵਿਤਾ ਵਿਚ ਭਾਈ ਵੀਰ ਸਿੰਘ ਤੋਂ ਲੈ ਕੇ ਹੁਣ ਤੱਕ ਵੱਖ-ਵੱਖ ਝਕਾਵਾਂ ਅਤੇ ਲਹਿਰਾਂ ਅਧੀਨ ਬੇਸ਼ੁਮਾਰ ਕਵੀਆਂ ਨੇ ਹਿੱਸਾ ਪਾਇਆ ਹੈ। ਹਰੇਕ ਧਾਰਾ ਨੇ ਆਪਣੇ ਵਿਲੱਖਣ ਪ੍ਰਤੀਨਿਧ ਕਵੀ ਦਿੱਤੇ ਹਨ।ਇਹ ਕਵਿਤਾ ਵੱਖੋ-ਵੱਖਰੀਆਂ ਧਾਰਾਵਾਂ ਚੀ ਗੁਜ਼ਰਦੀ ਹੋਈ ਅੱਜ ਉੱਤਰ−ਆਧੁਨਿਕ ਦੌਰ ਵਿੱਚ ਸੰਸਾਰ ਪੱਧਰ 'ਤੇ ਆਪਣੀ ਵਿਲੱਖਣ ਪਹਿਚਾਣ ਕਾਇਮ ਕਰ ਚੁੱਕੀ ਹੈ। ਇਹ ਭਾਵੇਂ ਖੁੱਲ੍ਹੀ ਕਵਿਤਾ ਦਾ ਰੂਪ ਹੋਵੇ ਜਾਂ ਫ਼ਿਰ ਛੈਦ-ਬੱਧ ਕਵਿਤਾ ਦਾ, ਹਰ ਰੂਪ ਆਪਣੇ ਆਪ 'ਚ ਮੁਕੰਮਲ ਹੋਂਦ ਬਣਾਉਂਦਾ ਹੈ ਅਤੇ ਸਮਾਜਿਕ ਚੇਡਨਾ ਦੇ ਨਵੇਂ ਔਜ਼ਾਰ ਵਜੋਂ ਸਾਹਮਣੇ ਆਉਂਦਾ ਹੈ।

ਵਰਤਮਾਨ ਦੌਰ ਦੀ ਪੰਜਾਬੀ ਕਵਿਤਾ ਨੇ ਅਨੇਕਾਂ ਨਵੀਆਂ ਕਰਵਟਾਂ ਲਈਆਂ ਜਿੱਥੇ ਇਹ ਕਵਿਤਾ ਦੂਸਰੇ ਸਾਹਿਤ ਰੂਪਾਂ ਦੇ ਮੁਕਾਬਲੇ ਆਪਣੀ ਸੰਪੂਰਨ ਪਹਿਚਾਣ ਕਾਇਮ ਕਰਦੀ ਹੈ, ਉੱਥੇ ਪੰਜਾਬੀ ਕਵੀਆਂ ਦੇ ਖਿੱਤੇ ਵੀ ਇਸ ਕਵਿਤਾ ਦੀ ਪਹਿਚਾਣ ਵਿੱਚ ਵਿਸ਼ੇਸ਼ ਭੂਮਿਕਾ ਨਿਭਾਉਂਦੇ ਹਨ। ਪੰਜਾਬ ਦੇ ਮਾਲਵੇ ਖਿੱਤੇ ਦੀ ਇਹ ਵਿਸ਼ੇਸ਼ਤਾ ਰਹੀ ਹੈ ਕਿ ਇੱਥੇ ਕਵਿਤਾ ਦੀ ਪਰੰਪਰਾ ਨੇ ਵੱਖਰੀ ਸ਼ਾਖ਼ ਕਾਇਮ ਕੀਤੀ ਹੈ। ਇਸ ਦੀ ਵਜ੍ਹਾ ਇਹ ਵੀ ਹੈ ਕਿ ਮਾਲਵਾ ਸਮਾਜਿਕ ਤੇ ਰਾਜਸੀ ਸਰਗਰਮੀਆਂ ਦਾ ਮੁੱਖ ਧੂਰਾ ਵੀ ਰਿਹਾ ਹੈ। ਇਸ ਖਿੱਤੇ ਨੇ ਲਗਭਗ ਹਰੇਕ ਧਾਰਾ ਦਾ ਪ੍ਰਭਾਵ ਪ੍ਰਤੱਖ ਰੂਪ 'ਚ ਕਬੂਲਿਆ ਹੈ। ਇਸ ਖਿੱਤੇ ਵਿੱਚ ਸੈਂਤ ਰਾਮ ਉਦਾਸੀ ਤੋਂ ਲੈ ਕੇ ਪ੍ਰੋ. ਜੋਗਾ ਸਿੰਘ, ਮਹਿੰਦਰਪਾਲ ਭੱਠਲ, ਪ੍ਰੋ. ਰਵਿੰਦਰ ਭੱਠਲ, ਪ੍ਰੋ. ਪੀਤਮ ਸਿੰਘ ਰਾਹੀ, ਕਰਤਾਰ ਕੈਂਬ, ਜਗਰਾਜ ਧੋਲਾ ਦੇ ਨਾਲ਼-ਨਾਲ਼ ਹੁਣ ਨੌਜਵਾਨ ਕਵੀਆਂ ਨੇ ਵੀ ਇਸ ਪਰੰਪਰਾ ਨੂੰ ਆਪਣੀ ਕਲਮ ਨਾਲ਼ ਅਮੀਰ ਬਣਾਇਆ ਹੈ। ਇਸੇ ਪਰੰਪਰਾ 'ਚੋਂ ਉਪਜੇ ਧਨੌਲਾ (ਬਰਨਾਲਾ) ਦੇ ਕਵੀ ਨਿਰਮਲ ਸਿੰਘ ਬਾਹਲੋਂ ਵੀ ਹਨ। ਜਿੱਥੇ ਆਧੁਨਿਕ ਕਲਮ ਦੀ ਨੌਕ

ਸ੍ਰਾ ਗੁਰੂ ਤਗ ਬਹਾਦਰ ਜੀ

(ਰਚਨਾ ਦੇ ਵਿਭਿੰਨ ਪੱਖ)

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Vaisag Mul sucos Ate Adhyatamak 'ਵੈਰਾਗ' ਮੁਲ ਸ਼ੁਰ ਅਤੇ ਅਧਿਆਤਮਕ ਸਾਧਨ ਵਜੋਂ ਜ Dr. Tassipal laws प्रतिव भर्तेता तेंबर

> ਅਧਿਸੀਨਾ ਕਰੀਏ ਕਾ ਉਪਨਾ ਦੁਆਰਾ ਰਵਿਤ ਸਲਕ ਆਪਣੀ ਵਿਲੇਸ਼ਣ ਪਹਿਚਾਣ वारामा महा अंका उत्तर करा। में बाहु जेवा आगात्म मा को मावत उचका सा

4

ਜੀਵਨ-ਦ੍ਰਿਸ਼ਟੀ ਦਾ ਸ਼ੇਬਠ ਨਮੂਨਾ ਹੈ। ਗੁੜ੍ਹ ਸਾਹਿਬਾਨ, ਭਗਤ ਕਵੀਆਂ ਅਤੇ ਵਕੀਵ ਵਿਕੇਸ਼ ਹੈ। ਗੁਰਮੀਤ ਕਾਵਿ ਸਿੱਖ ਧਰਮ ਸਾਧਨਾ ਦੇ ਅਧਿਆਰਮਕ ਸਿਧਾਂਤਾ ਅਤੇ ਨੇ ਬ੍ਰਜਮ ਗਿਆਨ, ਅਧਿਆਰਮਕ ਬਰਮ ਅਤੇ ਨੇਤਿਕ ਮੁੱਲਾਂ ਦੇ ਮਾਰਗ ਬੜੀ ਸਰਨਰਾ ਅਤੇ ਤਿਆਰਾ ਵਿਚੌਂ ਉਪਜੇ ਸਹਿਜ ਗਿਆਨ ਦਾ ਪ੍ਰਕਾਸ਼ ਹੈ ਪਰ ਉਹਨਾਂ ਦੀ ਸ਼ੀਬੀ ਦੀ ਵੀ ਵਿਸ਼ੇਸ਼ ਮਹਿਮਾ ਹੈ। ਬੇਸ਼ੱਕ ਗੁਰੂ ਤੇਗ ਬਹਾਦਰ ਜੀ ਦੀ ਸਮੁੱਚੀ ਬਾਣੀ ਤਪੱਸਕ ਸਾਹਿਬ ਜੀ ਦੀ ਬੋਡਾ ਹੈ, ਉੱਥੇ ਨੋਵੇਂ ਗੁਰੂ ਬੀ ਗੁਰੂ ਤੇਗ ਬਹਾਦਰ ਜੀ ਦੀ ਕਾਵਿ-ਵਲਨ ਨਾਲ ਪੇਸ਼ ਕੀਤੇ ਹਨ। ਜਿੱਥੇ ਪਹਿਲੇ ਪੰਜ ਹੁਰੂ ਸਾਹਿਬਾਨ ਦੀ ਬਾਣੀ ਸ਼ੀ ਗੁਰੂ ਗ੍ਰੰਥ ਰਚਨਾ ਵਿਚੌਂ ਜਿੰਨਾ ਪ੍ਰਭਾਵ ਉਹਨਾਂ ਦੁਆਰਾ ਰਚੇ ਗਏ 57 ਸਲੋਕਾਂ ਦਾ ਹੈ। ਉਸ ਵੀ ਬਾਰਨ ਸ਼ੀ ਗੁਰੂ ਤੇਗ ਬਹਾਦਰ ਜੀ ਦੀ ਵਿਨੱਖਣ ਬਚਸੀਅੜ ਵੀ ਹੈ। ਉਹਨਾਂ ਨੇ ਆਏ ਗੰਭੀਰ ਅਤੇ ਸ਼ਾਂਤ ਸੁਭਾਅ ਦੇ ਗੁਣਾਂ ਨੂੰ ਨਾਲ ਲੈ ਕੇ ਸਿੱਖ ਧਰਮ ਦੀ ਉਹੀ ਜਜ਼ਾ-ਮਿਸਾਲ ਸਾਨੂੰ ਹੋਰ ਕਿਸੇ ਵੀ ਕਾਵਿ ਵਿਚ ਕਿਪਰੇ ਨਹੀਂ ਮਿਲਦੀ। ਇਸ ਦੇ ਪਿੱਛੇ ਇੱਥ ਉਚਿਤ ਸਮਝਿਆ, ਨਾ ਕਿ ਬੀਬ ਝੁਕਾਉਣਾ। ਇਸ ਸੋਬੰਧੀ ਇੱਕ ਨੇਖ ਵਿਚ ਇਤਿਆਸ਼ਾਂ ਉਹਨਾਂ ਨੇ ਕਸ਼ਮੀਰੀ ਪੰਡਤਾਂ ਦੇ ਧਰਮ ਦੀ ਰੱਖਿਆ ਲਈ ਆਪਣਾ ਬਲੀਵਾਰ ਦੇਣਾ ਹੈ ਲਈ ਬਲੀਦਾਨ ਦੇ ਕੇ ਵਿਲੱਖਣ ਮਿਸਾਲ ਕਾਇਮ ਕੀਤੀ। ਗੁਰੂ ਸਾਹਿਬ ਅਨੁਸਰ ਕ ਸਮਾਨਤਾ, ਕਰਮ-ਕਾਂਡਾਂ ਤੋਂ ਆਜ਼ਾਦੀ ਵਾਲੀ ਪਰੰਪਰਾ ਨੂੰ ਅੱਗ ਤਰਦਿਆਂ ਮਹਿਤਾ ਬਦਰੀ, ਸਦਾਚਾਰੀ ਜੀਵਨ ਦੀ ਉੱਚਤਾ, ਭਾਈਚਾਰਕ ਸੰਦੇਸ਼, ਮਨੁੱਖਰਾ ਲੈ ਲਾ. ਇਕ ਮਨੁੱਖ ਨੂੰ ਧਾਰਮਕ ਆਜ਼ਾਦੀ ਦਾ ਅਧਿਕਾਰ ਹੋਣਾ ਚਾਹੀਦਾ ਹੈ। ਇਸੇ ਸ਼ੱਹ ਤੋਂ ਮੱਧ ਕਾਲ ਦੀਆਂ ਪ੍ਰਮੁੱਖ ਕਾਵਿ-ਧਾਰਾਵਾਂ ਵਿਚ ਗੁਰਮੀਤ ਕਾਵਿ ਦਾ ਮਹੱਤਵ

> लहीं ਹै। हिस संवेधी डा. बिबराभ सिथा धुंभट क्रिक्ट वर ਸੰਹਜ ਜੀਵਨ ਜਿਉਣ ਨਈ ਸੇਸ਼ਾਰਿਕ ਪ੍ਰਦਾਰਥਾਂ ਤੋਂ ਪਰ੍ਹੇ ਕਹਿ ਕੇ ਬਾਂਤੀ ਅਤੇ ਸਥਿਤਤਾ ਨਾਲ ਚੜਨਾ ਹੈ। ਇਹ 'ਵੇਰਾਗ' ਪ੍ਰਭੂ-ਪ੍ਰੇਮ ਲਈ ਹੈ, ਇਕ 'ਵੇਰਾਗ' ਸੁਹਿਬਦ ਭਾ ਅਤੇ ਜਿਉਣ, ਮੌਕ-ਮਾਇਆ ਤੋਂ ਮੁਕਤ ਹੈ ਕੇ ਪ੍ਰੇਮ ਅਤੇ ਸੁਹਿਰਵਤਾ ਨਾਨ ਪ੍ਰਭੂ-ਸਿਮਫਨ ਮੌਤਵ ਵਿਅਕਤੀ ਨੂੰ ਮਾਨਸਿਕ ਉਦਾਸੀ ਵੱਲ ਧੋਕਟਾ ਨਹੀਂ ਹੈ ਬਲੀਕ ਨੇਵ ਜੀਵਨ ਗੁਰੂ ਸਾਹਿਕ ਗੱਚਤ ਬਾਣੀ ਦਾ ਕੇਂਦਰੀ ਪੂਰਾ 'ਕੈਰਾਕਾਂ ਹੈ ਪਰੇੜੂ ਇਸ 'ਵਰਾਗਾਂ ਦਾ ਉੱਥੇ ਸੇਸ਼ਾਰ ਦੀ ਨਾਸ਼ਕਾਨਤਾ ਪ੍ਰਤੀ ਵੀ ਮਨੁੱਖ ਨੂੰ ਸੁਚੇਰ ਬਰਦੀ ਹੈ। ਦੂਸਰੇ ਪਾਲ ਭਾਵਾਂ ਵੈਰਾਗ ਦੀ ਭਾਵਨਾ ਸਿਸਾਰਕਾ ਜ਼ਿੰਦਗੀ ਦੀ ਉਪਰਾਮਰਾ ਨੂੰ ਜਿੱਕੇ ਕੇਂਦਰ ਕਿਵਾਂ ਤੇਂਬਦੀ ਹੈ ਸਲੋਕਾਂ ਦਾ ਮੁਲ ਸ਼ੁਰੂ ਅਤੇ ਭਾਵਨਾ ਵਿਚਾਕਾਂ ਨੂੰ ਬਾਦਦ ਵਿਚਾ ਕਰਿਆ ਗਿਆ ਹੈ। ਇਹ ਬਰੇ ਮਹੱਤਵ ਕਾਇਮ ਕਰਦ ਹਨ। ਗਹੁ ਨਾਕ ਬਲੀ ਸਨਦਾ ਨੂੰ ਪਰਖਣ ਹਾਂ ਹਾਂ ਇਹਨਾ "ਗੁਰੂ ਤੇਗ ਬਹਾਦਰ ਦਾ ਮਨ ਤੇ ਸਰੀਕ ਸੈਸਾਰ ਦੀ ਮੌਹ ਮਾਇਆ ਤੋਂ ਪਰ੍ਹੇ ਸੀ ਪਰ

ਰਹੀ ਸਨ ਅਤੇ ਨਾ ਹੀ ਕਿਸੇ ਨੂੰ ਡਰਾਉਣਾ ਪਸਿਦ ਕਰਦ ਸਨ।": ਦੁਨੀਆਂ ਦੇ ਮੌਕ, ਲਾਲਬਾਂ ਕੇ ਛਟਕਾਰਾ ਪਾਉਣਾ ਚਾਹੁੰਦੇ ਸਨ ਪਰ ਉਹ ਕਿਸੇ ਤੇ ਡਰਦੇ ਇਸ ਦਾ ਭਾਵ ਇਹ ਨਹੀਂ ਸੀ ਕਿ ਉਹਨਾਂ ਵਿਚ ਨਿਰਾਸਤਾ ਸੀ। **ਰ**ਲੂ ਜੀ ਵੇਸ਼ੱਕ

ਦੀ ਭਾਵਨਾ ਵਿਕਸਿਤ ਕਰਨ ਵਾਲੇ ਨੂੰ ਵੱਡੇ ਭਾਰਾਂ ਵਾਲਾ ਭਾਵ ਭਾਰਸ਼ਾਨੀ ਮਨੁੱਖ ਇਸ ਗੱਲ ਦੀ ਬੜੀ ਮਹਾਨਤਾ ਹੈ ਕਿ ਸ਼ੀ ਗੁਰੂ ਤੇਗ ਬਹਾਦਰ ਜੀ ਨੇ ਵੇਰਾਫ਼

ਜੰਬਰ ਤੋਂ ਵਰ ਕਹਿਣ ਲਈ ਗੁਰੂ ਸਾਹਿਬ ਨੇ ਵਿਸ਼ੇਸ਼ ਤੌਰ 'ਤੇ ਭੁਰਮਾਇਆ ਹੈ। ਘੜੀ ਨਹੀਂ ਕਰ ਸਕਦਾ। 'ਮਾਇਆ' ਸੰਬੰਧੀ ਮਹੱਲੇ ਨੌਵਾਂ ਦੇ ਸਲੋਕਾਂ ਵਿਚ ਦੁਨੀਆਵੀ ਤੋਂ ਪ੍ਰਾਪਤੀ ਜਾਂ ਪ੍ਰਭ ਵਿਚ ਲੀਨ ਹੋਣਾ। ਮਾਯਾਵੀ ਸੋਸ਼ਾਰ ਵਿਚ ਘਿਰਿਆ ਮਨੁੱਖ ਪ੍ਰਭ बंगु रुगतव बिरु गींच ब्रम्सर बिरुधा नरुभु प्रिवार (P मांकार बार्गत पान्यों भूवध खेवा अस्तर्रा ਇਸ ਤਰ੍ਹਾਂ ਅਧਿਆ ਤਮਕ ਤੌਰ 'ਤੇ ਚੰਤੇਨ ਵਿਅਕਤੀ ਦੇ ਜੀਵਨ ਦਾ ਮੁੱਖ ਮੰਡਵ ਹੈ ਥ੍ਰ ਨਾਨਕ ਸੂਲ ਰੇ ਮਨਾ ਤਿਹ ਨਰ ਮਾਬੇ ਭਾਗ੍ਹਾ॥ निधि विकार भवाली उसी लोई बेथ वेबराम ॥

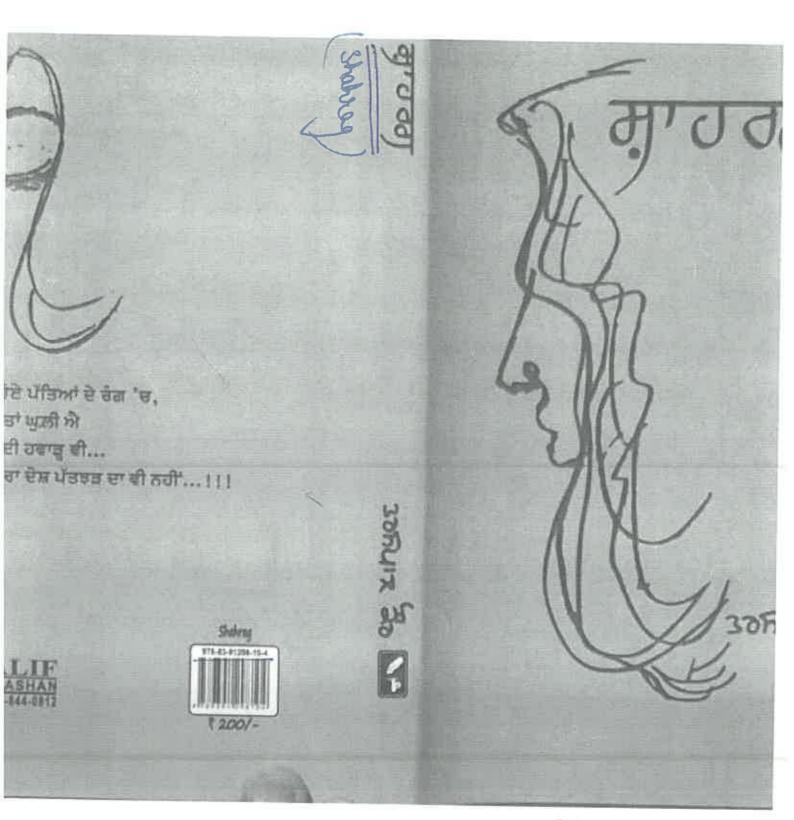
ਹਾਰੂਨ ਸਾਲਿਦ (Haroon Khalid) ਲਿਖਦੇ ਹਨ

For Him and even for Guro Nanak Dev ji, the religious question

with religion. They emphasized love, charity, bretherhood and perwas about the extent of one's faith, beyond the extensities towered

ਨਾਹਾ ਮੁਕੀਤ ਵਿਚ ਜਿਉ ਫਾਬਿਤ ਨਾਹਿਨ ਗੀਫਿ॥ ॰ ਮੈਂਨ ਮਾਇਆ ਮੇ ਕੀਮ ਕਹਿਓ ਨਿਕਸਤ ਨਾਹਿਨ ਮੀਤ। All an agent in the later of the later

ਮਨੁੱਖਤਾ ਦੀ ਹਾਮੀ ਹੈ। ਗੁਰੂ ਤੇਰਾ ਬਹਾਦਰ ਜੀ ਇਸ ਲੀਹ ਨੂੰ ਸਾਹਿਤ ਵੀ ਸਿੱਖ ਲਹਿਰ ਦੀ ਇਹ ਸਮਾਜਰ ਤੇ ਅਧਿਆਤਮਕ ਬਰਨਾ ਪਾਲ ਆ ਤਕ ਬਹਾਦਰ ਜੀ ਹਰਨਾ ਦੇ ਕਿਤਿੰਨ ਪੰਥੀ ।।।।।



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"同味子。产"

ਰਰਕਰਾ

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ਹ ਰਗਵੇਂ - ਅੰਵਲ / o ਜੀਗੇ ਦਰ ਸਿੰਘ ਨਿਜ਼ਲਾ (ਛਾ) ਗੈੱਥ ਅਤੇ ਉਸ ਦਾ ਕਾਵਿ-ਪ੍ਰਵਚਨ / o ਅਮਰ ਕੋਮਲ (ਛਾ) ਸਮੇਂ ਦੀ ਨਥਜ਼ ਵੋਟਲਦਾ ਕਵੀ ਕੈੱਥ / o ਸਗੀਰ ਸਿੰਘ ਜਗਤਾਰ ਲਾਲ ਤਾਰੇ ਦੀ ਪਾਈ ਥਾਤ / o ਤੇਜਵੇਤ ਮਾਨ (ਛਾ.) ਲਲ ਤਾਰੇ ਦੀ ਪਾਈ ਥਾਤ / o ਤੇਜਵੇਤ ਮਾਨ (ਛਾ.) ਲੋਕ ਦਰਦ ਦਾ ਹਿਰੇਸ਼ੀ : ਕੈੱਥ / o ਜਸਬੀਰ ਕੇਰ ਬਰਨਾਲਾ ਨੇ ਸਮੇਂ ਦੇ ਹਾਣ ਦਾ ਕਵੀ - ਕੈਂਥ / o ਜੇਸ਼ ਸਿੰਘ ਤਿਲਕ ਨਿਰਤੀ ਬੋਲਾਂ ਦਾ ਸਿਰਜਕ : ਕੈੱਥ / o ਸੰਧੂ ਵਰਿਆਣਵੀ (ਪ੍ਰੋ.) ਦਾਈ ਅੱਖਰੇ ਵਿਚੋਂ ਉਘੜਦੀ / o ਗੁਲਜ਼ਾਰ ਸਿੰਘ ਪੇਧੋਰ (ਛਾ.) ਲੈੱਥ ਦੀ ਕਾਵਿ ਚੇਤਨਾ / o ਨਿਰਜਣ ਬੋਹਾ ਸਮਾਜਵਾਦੀ ਸੁਰ ਵਾਲਾ ਕਵੀ ਕੈੱਥ / o ਮੰਘਾ ਸਿੰਘ (ਛਾ.) ਹ ਤਾਰਿਆਂ ਦੇ ਚਾਨਣ ਦਾ ਹੋਕਾ / o ਚਰਨ ਸਿੰਘ ਝਲੂਰ (ਛਾ.) ਨਿਤਾੜੇ ਅਤੇ ਬੇਵੱਸ ਸਮਾਜ / o ਤੇਜਿੰਦਰ ਦੇਡਿਹੋਕ ਹ ਕਰਤਾਰ ਕੈੱਥ ਦੀ ਕਵਿਤਾ / o ਭੁਪਿੰਦਰ ਸਿੰਘ ਬੇਦੀ (ਛਾ.) ਗ ਕਰਤਾਰ ਕੈੱਥ ਦੀ ਕਾਵਿਕ ਚੇਤਨਾ / o ਹਰਿਭਗਵਾਨ (ਛਾ.) 4. ਕਰਤਾਰ ਕੈੱਥ ਦਾ ਕਾਵਿਕ ਵਿਵੇਕ / o ਅਰਵਿੰਦਰ ਕੌਰ ਕਾਕੜਾ 15: ਬਰਨਾਲੇ ਦਾ ਕਿਰਤੀ ਕਵੀ :ਕਰਤਾਰ ਕੈੱਥ / o ਤਰਸਪਾਲ ਕੌਰ (ਛਾ.) 16. 'ਢਾਈ ਕਦਮ' ਦਾ ਮੂਲ ਪਛਾਣਦਿਆਂ / o ਗੁਰਦੀਪ ਸਿੰਘ	11 25 29 37 41 47 55 60 69 73 76 79 88 99 108 113 122
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> ਹਾਲੇ ਵੀ ਉਹਦੀ ਹੋਂਦ ਦੀ ਸ਼ਾਹਦੀ ਭਰਦੀ ਹੈ। ਉਹਨੇ ਕਿਹਾ ਹੈ ਵਿਚੌਂ ਰੁਖ਼ਸਤ ਹੋਇਆਂ ਵੀਹ ਸਾਲ ਤੋਂ ਉਪਰ ਹੋ ਚੁੱਕੇ ਹਨ ਪਰ ਉਸ ਦੀ ਕਵਿਤਾ ਤ ਉਹ ਨੌਕ ਕੋਵੀਨਾ ਦਾ ਕਠਾਰ ਵਿਚ ਆ ਗਿਆ। ਭਾਵ ਉਸ ਨੂੰ ਇਸ ਜਹਾਨ ਦੀ ਅਰਵਾਈ ਕਰਦਿਆਂ ਹੀ ਉਸ ਦੀ ਬਾਬਣੀ ਸ਼ਾਵ ਪ੍ਰਾਵਸ਼ਾ ਦੀ ਜਿੱਬਰ ਹਵੀ ਸਥਾਪਨਾ ਕੀਤੇ। ਕਰਤਾ ਰਬੰਦ ਵਿਸ਼ਹਤਾ ਦਾ ਦਸ ਵਰ ਪੰਦਾਨ ਰਿਹਾ ਅਤੇ ਜਗਤਾਰ ਹੋਰਾਂ ਤੋਂ ਪ੍ਰੇਰਨ` ਲੈਂਦਿਆਂ 1959 ਵਿਚ 'ਲਿਖਾਰੀ ਸਭਾ ਬਰਨਾਲਾ' ਦੀ ਪੰਜਾਬੀ ਸਾਹਿਤ ਸ਼ਭਾਵਾਂ ਦੇ ਮੋਢੀ ਪੁੱ. ਪ੍ਰੀਤਮ ਸਿੰਘ ਰਾਹੀ ਅਤੇ ਜਗੀਰ ਸਿੰਘ ਸੁੰਡਿਆਂ ਵਿਚੋਂ ਕਰਤਾਰ ਕੈਵ. ਜਾਰੋਜ਼ਦਰ ਸਿੰਘ ਨਿਰਾਲਾ ਤੇ ਹੋਰ ਸਾਥੀਆਂ ਹ ਵਿਚ ਸ਼ਾਹਿਤਕ ਲੀਜ਼ਰ ਦਾ ਜੋਵ ਬੀਨੁਆ। ਇਹਨਾਂ ਵਿਚ ਹੀ ਅਗਲ ਨਵ 구 MULTINES HE STATE COLOR COLOR STATE STA ਦੀਆਂ ਸਾਹਿਤਕ ਗਤੀਵਿਧੀਆਂ ਆਫ਼ਿਰ ਹੋਈਆਂ ਤਾਂ ਉਸ ਸਮੇਂ ਨਵੇਂ ਨੌਜਵਾਨ ਅੰਗ ਉਣ ਦਾ ਚੌਕਦਾਰ ਛੁਦਾ ਹੈ। ਜਦੋਂ 1555-51 ਦ ਦੌਰਾਨ ਜਰਨਾਨ ਬਲ ਦ ਕ ਲਾਕ ਲੀਪਰ ਦੀ ਪਿੰਡ ਜੂਮੀ ਤਿਆਰ ਕਰਦਾ ਹੈ, ਉਹ ਲਾਕ ਕਵਾ CHANGE - THE BERTH FIGURE FOR ISLANDED FOR THE ਹ<u>ੀ ਜੁੜ ਗਏ ਸਨ। ਮਾਡ ਵਿਚਾਰ ਅਨੁਸਾਰ ਜਿਹੜਾ ਵੀ ਸ਼ਾਇਰ ਲੋਕ ਸਭਿਆਚਾਰ</u> ਵਾਲਾ ਕਾਮਾ ਅਤੇ ਕਵੀ ਜੀ।ਉਹ ਲੋਕ-ਹਿਤੇਜ਼ੀ ਸਾਹਿਤ-ਧਾਰਾ ਨਾਲ ਸ਼ੁਰੂ मानिका है ने में देखा है जाते हैं जाता है कि के परिवास ਾ ਜੀ ਕਵਿਤਾ ਦਾ ਮੁੱਲਾਂਕੜ ਅਤੰਦਕਾਂ ਕਿਹਾ ਜਾ ਸਕਦਾ ਹੈ ਕਿ ਉਹ CHE STOCK OF THE PERSON AND THE PERS

, ਮੈਣ ਹਾਂ ਦੂ ਤੋਂ ਬੜ੍ਹਾ ਵਾਲੇ ਵਿੱਤੇ ਸਦ ਵਿਸ਼ਾ ਜ਼ਿੰਦ ਪੁੱਜਣਾ ਪੁੱਜ ਜਾਂਦੇ ਨੇ ਸ਼ਾਇਰ, ਸਾਹਰ, ਹਵਾਮਾਂ

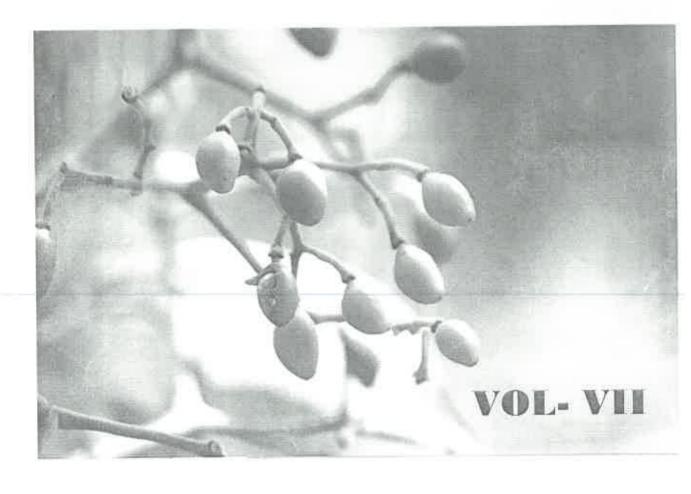
प्राम्य स्था-युक्त हुवस कहत ਦੀ ਐੱਗ ਹੈ। ਕਿਹ ਤੀਵਰੀ ਮੁਸਤਕ ਕਾਰਨਗੇ ਹਨ। 1988 **ਸਵੇਲ ਛਪੀ** 1ਉਹ ਪਹਿਲਾ ਕਾਵਿ ਸੰਗ੍ਰਹਿ 'ਤੀਸ਼ਰੀ 'ਜੱਖ' । 969: ਛਪਿਆ ਸੀ ।ਫਿਰ ਦੂਸਰੀ ਪੁਸਤਕ हिंग्स है। क्रिक्ट के क्षेत्र के प्रत्यात क्ष्मण व, स्थान है है है है है। ਸੀ।ਬੈਬਾ ਨੂੰ ਵਿਨਾਜ਼ਕਾਰੀ ਮੈਨਦਾ ਸੀ।ਉਹ ਕਰਾਂਤੀ ਦੀ ਦਰਿਸ਼ਟੀ ਅਪਣਾਉਂਦਾ अपने अपन सका तर्ने सन्ते कि तर, वर्ष कर्म, विश्वास प्रति । ਜ਼ਕ ਵੇਰਸ਼ਕ ਬਣਨ ਵਾਲਾ ਸ਼ਾਇਰ ਨਹੀਂ ਜੀ। ਉਹ 'ਚਰਮ' ਵਿਚ ਵਿਸ਼ਵਾਸ `ਜਦੋਂ' ਪਿੰਡ ਬੋਲਦਾ ਹੈ' -1974 - ਵਿਚ ਛਪੀ। ਉਸ ਦੇ ਸੀਨੇ ਵਿਚ ਪਰਿਵਰਤਨ ਸੂਰਜ ਦੀ ਭਾਲ ਵਿਚ ਨਿਕਲ ਤੁਰਦਾ ਹੈ।ਇਸ ਧਾਰਨਾ ਤਹਿਤ ਉਸਦ ਕੈਂਥ ਦੀ ਕਵਿਤਾ ਦੀ ਵਿਲੱਖਣਤਾ ਹੈ ਕਿ ਚੁੱਪ ਕਰਕੇ ਬੈਠਣ ਵਾਲ ਤ ਪਾਣਤ ਫਲਮੜ ਵਿਚ ਵਿਸ਼ਵਾਸ

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MEDICO BIOWEALTH OF INDIA



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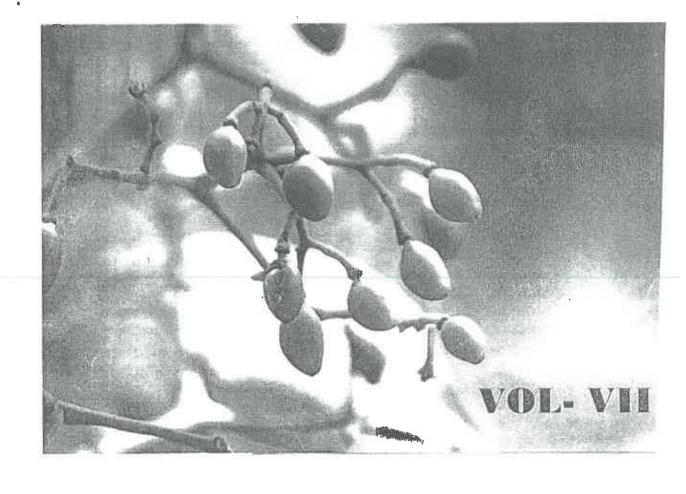
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MEDICO BIOWEALTH OF INDIA



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Chapter 1 Effect of phenylalanine on the production of flavonoids in three cotton cultivars Gossypium arboreum (RG-8), G. hirsutum (GA and Pusa 8-6) grown in-vitro

Amardeep Kaur and Manish Kumar

Abstract: Plant tissue culture technique is of great interest as it serves as an important tool for geneticists, plant breeders, morphologists, pathologists and physiologists in understanding and solving various problems. Many plant species are grown in vitro which provide many advantages over the intact plant parts grown in vivo for biosynthetic studies. Secondary metabolites are naturally occurring compounds in plants. *In-vitro* plant materials are good source of secondary metabolites and by using precursors, these metabolites production can be enhanced. So in the present study, effect of various concentrations of phenylalanine (PA) on the production of flavonoids in tissue cultures of three cotton varieties has been studied. Results demonstrated enhanced production of flavonoids. The current work will be of great value/interest in biotechnological and pharmaceutical research.

.Keywords: Plant tissue culture, Phenylalanine, Flavonoids, Cossypium

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Introduction: Organic synthesis of many plants secondary metabolites is in great progress although most of these compounds are difficult to synthesize chemically. Food consumers also prefer natural compounds than synthetic ones in general. These facts lead to the development of procedures for growing plant tissues *in vitro*. Plant

Chapter 5

Evaluation of phytotoxic, antioxidant and anticancer activities of Parthenium hysterophorus L. and Cannabis sativa L.

Manish Kumar, Amardeep Kaur, Aashita Garg, Khusboo, Jashanpreet Kaur and Anu Rani

Abstract: Medicinal plants contain a variety of phytochemicals, including lignans, terpenoids, alkaloids, flavonoids, phenolic acids, etc. with a variety of biological functions. In the present study, Cannabis sativa and Parthenium liysterophorus are investigated for phytotoxic, antioxidant and anticancer activity along with their phytochemical analysis. Results demonstrated that aqueous extracts of selected plants leaves had significant phytotoxic effect on the growth of Vigna radiata L (Mung bean) and Zea mays L. (Maize) seedlings as evident from various parameters studied (shoot length, root length, fresh weight and dry weight). Results of antioxidant activity revealed that both aqueous extracts of C. sativa & P. Insterophorus leaves showed good scavenging activities. The IC50 value were found to be 348.21 µg/ml and 610.50 µg/ml respectively. Further, both extracts also showed antiproliferative effects against human non-small cell lung carcinoma (NSCLC) A549 in MTT assay. The GI₅₀ for aqueous extracts of C. sativa & P. hysterophorus leaves were found to be 47.75 μg/ml and 53.78 μg/ml respectively. Activities obtained in the present studies are may be due to various phenolic phytochemicals present in the extracts. Conclusively, results of the present study highlights the bioactive efficacy of both selected plants.

Keywords: Cannabis sativa, Parthenium hysterophorus, Phytotoxic, Antioxidant, **Antiproliferative**

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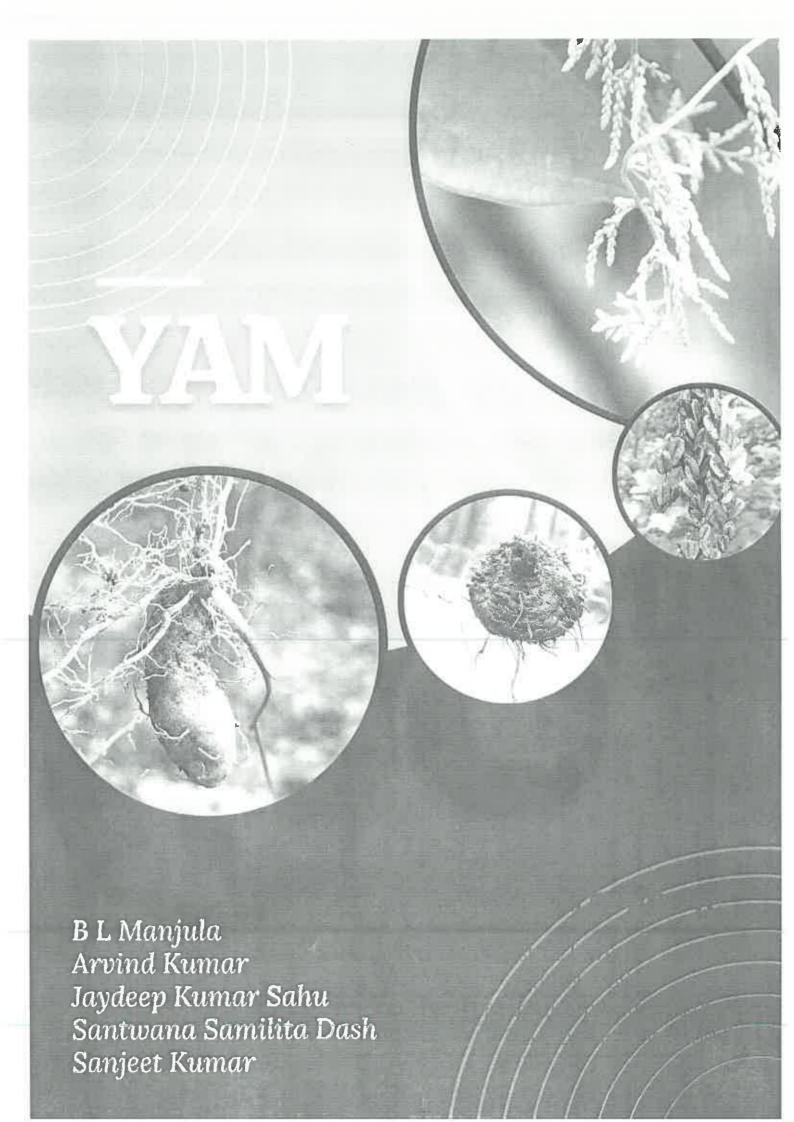
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Chapter 4 Food, medicinal and ecological significance of Dioscorea bulbifera (Dioscoreaceae)

Nithiyananthan Sinnadorai, Manish Kumar, M. Bidyalakshmi Devi, Jayashri Yuvaraj Jadhav, Sweta Mishra and Sanjeet Kumar

Abstract: Dioscorea bulbifera is a is a wild edible tuberous twiner belonging to the family Dioscoreaceae. Tuber of D. bulbifera is supplement wild food crop, widely distributed around the world. It contains a significant amount of carbohydrates, starch, sugar, proteins, lipids, vitamins, minerals, fiber, etc. It is extensively used to treat diverse diseases and disorders. The tribal communities use the tubers of D. bulbifera as a source of nutrition. Considering its importance, an attempt has been made to document the morphological characters, ethnomedicinal, and food values of D. bulbifera to explore its nutraceutical values, which will be helpful during food crises.

Keywords: Dioscoreaceae, Food problem, Tuber, Ethnomedicine

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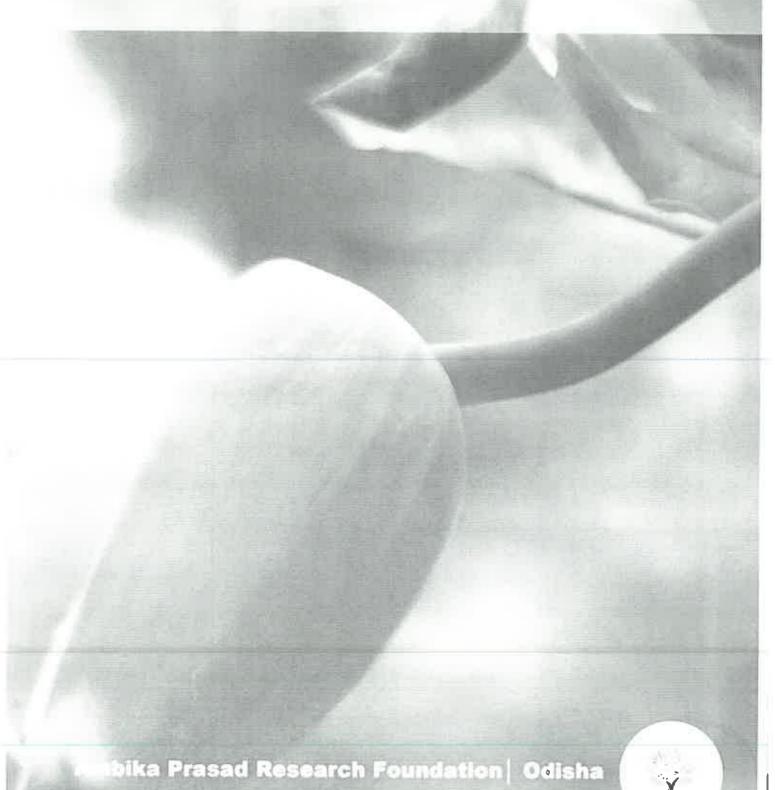
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Introduction: Dioscoreaceae is a family of monocotyledonous flowering plants, comprising about nine genera with about 715 species, considered one of the earliest families of the plant kingdom (Adomenien and Venskutonis 2022). Species of this family have a mostly Pantropical distribution. The family as most recently described contains 4 genera: Dioscorea, Stenomeris, Tacca (previously classified in Taccaceae), and

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Chapter 4

Medicinal and economic values of *Cissampelos pareira* (Menispermaceae)

Bhagwati Prashad Sharma¹, Manish Kumar², Goutam Basak³, Amardeep Kaur^{2*}, Sugimani Marndi⁴ and Sanjeet Kumar⁴

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Abstract: Tribal communities play a vital role in the conservation of traditional knowledge as they have immense knowledge of economically important medicinal plants and how to consume them. Traditional healers use many medicinal plants to treat various ailments. Cissampelos parcira is one of the medicinal plants used by the tribals to cure many diseases and disorders. It has a wide range of medicinal uses, but apart from therapeutic uses, it is extensively used for economic purposes. In the local market, the root of C-parcira is sold in the forms of raw and pills. Keeping the importance of C-parcira, an attempt has been made to do a field and literature survey on medicinal and economic values of C-parcira. Results revealed that tribal communities used its plant parts to cure a various health problems and as a source of livelihood. The chapter highlights the importance of local flora and the need for value addition to provide livelihood opportunities to the local populace.

Keywords: tribal communities, traditional knowledge, medicinal uses, economic uses

Introduction: The world's population wishes to settle in cities in search of good education. employment, and health-care facilities. Most youth from rural and tribal areas migrate to urban jungles to obtain the same, resulting in poor immunity, a platform for infectious disease transmission, urbanisation impacts in village areas, and the loss of traditional practices, including traditional therapeutic systems based on local plants. Slowly we are losing our scientific cultural practices based on nature and climate. Researchers throughout the world working on value additions of locally available plants to develop livelihood opportunity to get the sustainability and reestablishment of harmonical relationship between community and biowealth. They are screening the agents from the forest which are used in day-to-day life of communities to mitigate the above-mentioned problems. Cissampelos pareira (Plate 1) is a climbing herb, easily available and has medicinal and economic values. C. pareira belongs to the family Menispermaceae. Commonly, it is known as Musakani, Akanabindhi, Patha, Kijri, Batindu and Ghodakur. It is a climbing plant that mostly grows in damp to dry habitats. It is widely distributed in India (Himachal Pradesh, Tamil Nadu, Bihar, West Bengal, Punjab and Rajasthan). Its fruiting and flowering period is from June to November. C. pareira is a slender climber supported by trees. The leaves are simple, alternate, peltate and velvet. The flowers, which are tiny and greenish yellow in colour, are grouped in the axils. The seeds are horseshoe shaped. The root of C. pareira is used to treat many diseases and disorders. Root paste is also used in muscular swellings. It has a rich source of bioactive compounds like alkaloids. The root is also used to make country liquor and sold in the local markets as a fermenting agent. Hence, it is a good agent for doing value addition for the creation of livelihood options. Keeping the importance and easy availability of C. pareira in mind, an attempt has been made to document the medicinal and economic values of the plant,

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Food and medicinal values of some Ficus species

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Abstract: In Indian mythology, the Ficus species play an important role in India. Some Ficus species play a vital role and have a religious significance in rituals like the peepal tree (Ficus religiosa) which is worshipped in India. The Ficus species have many food and medicinal values. It has some bioactive compounds which is used to treat many aliments like diabetes, piles, toothaches, gum problems and skin infections. Figs are consumed by many avian species. The conservation of Ficus species is also the conservation of wasp and avian species. A particular wasp pollinates specific Ficus species. Keeping the importance of Ficus species as food, medicine and in ecological balance, an attempt has been made to enumerate some common Ficus species of India along with their food and medicinal values. A total of 20 species of Ficus are reported here with their importance. The chapter highlights the importance of Ficus species as a source of optional food and medicinal agents.

Keywords: Bioactive compounds, mythology, avian species, medicinal value

Introduction: The genus *Ficus*, commonly known as fig, belongs to the family Moraceae, which includes a large number of species comprising about 1.100 species including trees, shrubs, climbers, and creepers. It is mostly found in tropical and sub-tropical regions. The Moraceae family is characterized by the presence of buttress and prop root. They have stipules. The also show presence of milky latex. The main key character is fruit that have many seeds and an inflorescence inside them known as syconium. The genus is very important due to its high ecological, nutritional, medicinal and economic values. It is also important for avian species as they consume the fruit of many Ficus species. Some Ficus species are edible, and some have medicinal values. Apart from food and medicinal values, Ficus species are known for their mythological importance and availability in sacred groves (Satapathy and Kumar 2017). The peepal tree (Ficus religiosa) is worshipped in most parts of India. Ancient history shows a range of information regarding Ficus species. It is believed that peepal is considered as an incarnation of Vishnu and Buddha (Kumar et al. 2021). From that day onwards, it has been a sacred tree in India particularly among the Hindus. Fruits are edible by the local communities as a vegetable and in dried form. Fruits are also consumed by many avian species. They also form shelter in species of *Ficus*. The fruit is mostly fleshy, hollow and vessel. Leaves are alternate, simple, entire and spirally arranged. Flowers are unisexual. Ficus species is different from other species because the reproduction systems are exclusive. It can only be pollinated by the wasp that are associated with it, and the wasp can only lay eggs within the fruit that is associated with it. The *Ficus* species is also used to cure many diseases since long. Some fruits are used to improve the immunity and to reduce the stomach problems. There might be a number of secondary metabolites responsible for the therapeutic potential of Ficus species. like phenolic compounds, phytosterols, volatile compounds etc. Keeping the importance of food, medicinal and ecological importance of Ficus species in mind, an attempt has been made to document the importance of some common Ficus species of India.

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BIOACTIVE PHARE FROM HIMALAYAC A PHYTOTHERAPEUTIC APPROACH

Editors:

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Berlinan Books

Bioactive Phytochemicals from Himalayas: A Phytotherapeutic Approach

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Hepatoprotective Molecules from Himalayan Plants and their Role in Xenobiotic Mechanisms: A Tabulated Review

Kritika Pandit¹, Amritpreet Kaur¹, Manish Kumar², Renu Bhardwaj¹ and Satwinderjeet Kaur^{1,*}

Abstract: Liver is essential for the maintenance and functioning of the body. The liver is responsible for the majority of the metabolic and physiological performance of our body, as well as the detoxification of different drugs and xenobiotic agents. During the detoxification process, the reactive chemical intermediates damage the liver, resulting in liver toxicity. As a result, maintaining a healthy liver is critical to overall health. Hepatic damage is caused by several factors, including environmental pollutants, such as chemicals, consumption of certain medications, poor eating habits, excessive alcohol, and other hepatotoxins, as well as viruses. The liver is sensitive to a range of diseases, including henatitis, henatic steatosis, cirrhosis, and henatocellular cancer, as a consequence of its multifunctionality and constant exposure to toxins. These diseases are substantial sources of mortality and morbidity. Long-term use of the current synthetic medicines to treat liver problems causes further liver damage. Herbal medicine is the major source of basic health care for around 75 80% of the world's population, primarily in developing countries because of its better cultural acceptability, compatibility with the human body, and fewer side effects. Medicinal plants from the Himalayas are used in the Avurvedic, Unani, and other traditional systems of medicine and plant-based pharmaceutical industries. The Tibetan system of medicine is also based on Himalayan plant species. Herbal medicines are extensively used in the treatment of liver diseases, in the absence of adequate liver hepatoprotective medications in modern medicine, a variety of medicinal plants and their phytochemicals are used to treat hepatic ailments in the traditional system of medicine in the Himalayan regions, The Himalayas are a rich source of medicinal plants and their phytoconstituents, which play a significant role in hepatoprotection. In the current chapter, an attempt was made to collect data on the Himalayan medicinal plants and their biomolecules being traditionally used to treat hepatotoxicity.

Keywords: Biomolecules, Hepatoprotection, Himalayas, Liver, Medicinal plants.

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ANTIDIABETIC PLANTS VOL - II

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MEDICO BIO-WEALTH OF INDIA

MEDICO BIO-WEALTH OF INDIA VOL-VIII

Rakhee Dimri Bhagwati Prashad Sharma Arvind Kumar Banshidhar Behera Sanjeet Kumar



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Survey on trees growing in the campus of S.D. College, Barnala, Punjab, India

Amardeep Kaur, Manish Kumar*, Harmeer Kaur, Wattandeep-

SD College, Barnala-148101, Punjab India Email-Id: kumarmanish639@gmail.com

ABSTRACT

In the present work, survey was carried out to study the tree species growing in the campus of S.D. College, Barnala (Punjab). College campus is expanded over 6.2 acres of land which includes a sports ground, a botanical garden, an NSS park and a temple open area. The campus area is the representative of climax vegetation and diversity of tree species. The data collection survey showed that there are 42 tree species related to 36 genera and 19 families in the campus. Fabaceae and Rutaceae were found to be dominant families among dicots. In the present situation of increasing urbanization, attention is needed to be paid to conserve the green places. As these small-scale studies provide a base line data of the plant species.

Key words: College campus, Trees species, Fabaceae

INTRODUCTION

The wealth of vegetation on the earth shows a vast array of diversity of form and mode of life. Some are minute herbs while others are gigantic trees attaining a height of about 100 meters and with very complex structure. Man has been completely dependent on plants for food sources, clothing, shelter, oxygen production by utilizing solar energy. CO₂ consumption by fixation in food formation and thus having an environment equilibrium for survival. Biofuels formation, timber woods, medicines, oils and many more natural products are produced by plants (Costanza et al. 1997). India has one of the earliest known civilization and plants have been studied in this part of the world from time immemorial. Remains of the Indus valley civilization show without any doubt that wheat, rice, barley and cotton were



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Chapter 10

Medicinal plants used against *Escherichia* coli: antimicrobial agents for future drug formulation

¹Ajay B. Jadhao, ²Anuradha Das*, ³Swati C Topno, ⁴Likha Rido, ⁵Manish Kumar, ⁶Binod Kumar Mahapatra, ⁷Deepmala U Yadav, and ⁸Sanjeet Kumar

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ABSTRACT

the gastrointestical or contrat pervous systems in even the most robust human hosts. There are several annihild at have carable properties but have more side effects. Therefore, the present plants used against disease caused by F colour tribes conduct.

Some of the problems caused by F colour tribes conduct.

Some of the problems caused by F colour tribes conduct.

Keywords: Pathogenic papers, medicinal plants, gram-negative bacteria, side effects

Nariwad : vibhan Parpekh

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15. ਨਾਰੀ ਮਨ ਦਾ ਵੇਗਮਈ ਪ੍ਰਗਟਾਅ: ਪੰਜਾਬੀ ਲੋਕਗੀਤ - ਡਾ. ਅਮਨਦੀਪ ਕੌਰ 117

16. ਪੰਜਾਬੀ ਨਾਟਕ ਦੇ ਸੰਦਰਭ ਵਿੱਚ ਨਾਰੀਵਾਦ- ਵੀਰਪਾਲ ਕੌਰ 122

17. ਭਗਵੰਤ ਰਸੁਲਪੁਰੀ ਦੀਆਂ ਕਹਾਣੀਆਂ ਵਿਚ ਔਰਤ ਦੀ ਸਥਿਤੀ - ਡਾ. ਕੁਲਵਿੰਦਰ ਸਿੰਘ 128

18. ਔਰਤ ਦੀ ਸਮਾਜਿਕ ਸਥਿਤੀ ਦੀ ਪੇਸ਼ਕਾਰੀ ਕਰਦਾ ਕਹਾਣੀ ਸੰਗ੍ਰਹਿ 'ਜਨਾਨੀ ਪੌਦ' ਇਕ ਵਿਸ਼ਲੇਸ਼ਣ - ਅਮਰਜੀਤ ਸਿੰਘ ਗਦਰਾਣਾ 141

19. ਸਰਘੀ ਦੀ ਕਹਾਣੀ ਵਿੱਚ ਔਰਤ:ਇਕ ਅਧਿਐਨ (ਹੋਲੀਡੇ ਵਾਈਫ਼ ਦੇ ਪ੍ਰੰਸਗ 'ਚ)

ਨਾਰੀਵਾਦ : ਵਿਭਿੰਨ ਪਰਿਪੇਖ / 7

entent)

 ਪੰਜਾਬੀ ਕਹਾਣੀ : ਨਾਰੀਵਾਦੀ ਚਿੰਤਨ 1960 ਤੋਂ 1990 ਛੀ ਕਹਾਣੀ ਦੇ ਸੰਦਰਭ ਵਿੱਚ− ਡਾ. ਨੀਲਮ ਸ਼ਰਮਾ 13

2. ਨਾਰੀਵਾਦ – ਡਾ. ਬਿਕਰਮਜੀਤ ਸਿੰਘ 20

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ੁਪਾਚੀਨ ਕਾਲ ਤੋਂ 21ਵੀਂ ਸਦੀ ਤੱਕ ਦੇ ਨਾਰੀ ਕਾਵਿ ਵਿਚਲਾ ਨਾਰੀਵਾਦ – ਡਾ. ਤਰਸਪਾਲ ਕੌਰ 44 ਪਿਕਰੈਮ Kool You ਤੋਂ Sodi Yak Kool Wikka Noveled

6. ਸਮਕਾਲੀ ਨਾਰੀ ਕਾਵਿ: ਨਾਰੀ ਮੁਕਤੀ ਦਾ ਮਸਲਾ– ਡਾ. ਸੁਨੀਤਾ ਸ਼ਰਮਾ 51

 ਸਮਕਾਲੀ ਨਾਰੀ ਕਾਵਿ ਦਾ ਬਿੰਬਾਂ ਦੇ ਅਨੁਭਵ ਦਾਇਰੇ ਦੇ ਆਧਾਰ 'ਤੇ ਵਿਚਾਰਧਾਰਾਈ ਚਿੰਤਨ- ਰੁਪਿੰਦਰ ਕੋਰ 58

ਸਮਕਾਲੀ ਪੰਜਾਬੀ ਕਵਿਤਾ ਵਿੱਚ ਨਾਰੀ ਚੇਤਨਾ: ਵਿਭਿੰਨ ਪਾਸਾਰ
 ਮਨਪ੍ਰੀਤ ਕੌਰ 73

ਅਜੋਕਾ ਨਾਰੀ ਕਾਵਿ ਤੇ ਉਸਦਾ ਵਿਸ਼ਾ ਖੇਤਰ ਜਗਮੀਤ ਸਿੰਘ 81

10. ਸੁਖਵਿੰਦਰ ਅੰਮ੍ਰਿਤ ਦੇ ਕਾਵਿ ਵਿਚ ਨਾਰੀਵਾਦੀ ਚੇਤਨਾ
 ਡਾ. ਮਨਦੀਪ ਕੋਰ 87

11. ਸੁਖਪਾਲ ਦੀ ਕਵਿਤਾ ਲਛਮਣ ਰੇਖਾ (ਨਾਰੀ ਦੇ ਪ੍ਰਸੰਗ ਵਿਚ)ਡਾ. ਹਰਜਿੰਦਰ ਸਿੰਘ ਲਾਡਵਾ 95

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13. ਅਗਤਿੰਦਰ ਸੰਧੂ ਦੀ ਕਵਿਤਾ ਵਿੱਚ ਨਾਰੀ ਸੰਵੇਦਨਾਂ – ਹਰਮੇਸ਼ ਕੁਮਾਰ 103

14. ਔਰਤ ਮਨ ਨਾਲ ਸੰਬੰਧਤ ਲੋਕ ਕਾਵਿ : ਸੁਹਾਗ ਇੱਕ ਅਧਿਐਨ – ਕੁਲਵਿੰਦਰ ਕੋਰ 112

15. ਨਾਰੀ ਮਨ ਦਾ ਵੇਗਮਈ ਪ੍ਰਗਟਾਅ: ਪੰਜਾਬੀ ਲੋਕਗੀਤ – ਡਾ. ਅਮਨਦੀਪ ਕੌਰ 117

16. ਪੰਜਾਬੀ ਨਾਟਕ ਦੇ ਸੈਦਰਭ ਵਿੱਚ ਨਾਰੀਵਾਦ- ਵੀਰਪਾਲ ਕੌਰ 122

17. ਭਗਵੰਤ ਰਸੂਲਪੁਰੀ ਦੀਆਂ ਕਹਾਣੀਆਂ ਵਿਚ ਔਰਤ ਦੀ ਸਥਿਤੀ – ਡਾ. ਕੁਲਵਿੰਦਰ ਸਿੰਘ 128

18. ਔਰਤ ਦੀ ਸਮਾਜਿਕ ਸਥਿਤੀ ਦੀ ਪੇਸ਼ਕਾਰੀ ਕਰਦਾ ਕਹਾਣੀ ਸੰਗ੍ਰਹਿ 'ਜਨਾਨੀ ਪੌਦ' ਇਕ ਵਿਸ਼ਲੇਸ਼ਣ – ਅਮਰਜੀਤ ਸਿੰਘ ਗਦਰਾਣਾ 141

19. ਸਰਘੀ ਦੀ ਕਹਾਣੀ ਵਿੱਚ ਔਰਤ:ਇਕ ਅਧਿਐਨ (ਹੋਲੀਡੇ ਵਾਈਫ਼ ਦੇ ਪ੍ਰੰਸਗ 'ਚ)

ਨਾਰੀਵਾਦ : ਵਿਭਿੰਨ ਪਰਿਪੇਖ / 7

ਪਿਸ਼ਨੀ ਮਹੁਕੀ ਨਿ ਕੀ ਨਿਕੀ। ਜਿਲੇ ਪਿਕਤੀ। ਪਾਲੀਕ ਨੇਕੁਪਤਕੀ। ਪ੍ਰਾਚੀਨ ਕਾਲ ਤੋਂ 21ਵੀਂ ਸਦੀ ਤੱਕ ਦੇ ਨਾਰੀ ਕਾਵਿ ਵਿਚਲਾ ਰਾਜਵਾਦ

- ਡਾ. ਤਰਸਪਾਲ ਕੌਰ pertugues, so

ਉਸਦੀ ਹੋਂਦ ਵੀਹਵੀਂ ਸਦੀ ਤੋਂ ਪਹਿਲਾਂ ਬਿਹਤਰ ਸੀ ਇਹ ਤਾਂ ਪ੍ਰਾਚੀਨ ਕਾਲ ਤੋਂ ਹੀ ਆਧੁਨਿਕ ਚਿੰਤਕਾਂ, ਬੁੱਧੀਜੀਵੀਆਂ ਨੇ ਇਸ ਚਿੰਤਨ ਨੂੰ ਹੋਂਦ ਵਿਚ ਲਿਆਂਦਾ, ਪਰ ਬਾਮਿਲ ਕਰਦਾ ਹੈ। ਦੂਸਰੇ ਪਾਸੇ ਭਾਵੇਂ ਇਹ ਚਿੰਤਨ ਵੀਰਵੀਂ ਸਦੀ ਦੀ ਦੇਣ ਹੈ ਔਰਤ ਆਧਾਰਿਤ ਪ੍ਰਸਥਿਤੀਆਂ ਤੇ ਔਰਤ ਦੀ ਹੋਂਦ ਦੇ ਚਿੰਤਨ ਨੂੰ ਆਪਣੇ ਘੇਰੇ 'ਚ ਪੱਛਮ ਦੀ ਜਾਂ ਫ਼ੇਰ ਅਰਥ ਜਾਂ ਇਸਲਾਮਿਕ ਮੁਲਕਾਂ ਦੀ ਔਰਤ। ਨਾਰੀਵਾਦੀ ਚਿੰਤਨ ਇਸ ਦਾ ਅਰਥ ਇਹ ਨਹੀਂ ਕਿ ਔਰਤ ਦੀ ਸਥਿਤੀ ਅਤੇ ਸਮਾਜਿਕ ਤਾਣੇ-ਥਾਣੇ ਵਿਚ ਔਰਤ ਦੀਆਂ ਅਨੇਕਾਂ ਤਾਸਦੀਆਂ ਨੂੰ ਜਨਮ ਦਿੱਤਾ। ਇਹ ਭਾਵੇਂ ਪੂਰਬ ਦੀ ਔਰਤ ਸੀ, ਔਰਤ ਇੰਜ ਹਾਬੀਏ 'ਤੇ ਆ ਗਈ। ਇਸ ਅਸਾਵੇਪਣ ਨੇ ਵਕਤ ਦੇ ਹਰ ਪੜਾਅ 'ਤੇ ਸੰਸਥਾਵਾਂ ਦੇ ਹੋਂਦ ਵਿਚ ਆਉਣ ਨਾਲ ਇਸਤਰੀ ਮਰਦ ਸੰਬੰਧਾਂ ਦਾ ਤਾਣਾ-ਬਾਣਾ ਪ੍ਧਾਨ ਸਮਾਜ ਦਾ ਨਿਯੰਤਰਣ ਹੋਣ ਕਾਰਨ ਹੋਲੀ-ਹੋਲੀ ਨਿੱਜੀ ਜਾਇਦਾਦ ਦੀਆਂ ਆਪਣੇ-ਆਪ ਵਿਚ ਮੁਕੰਮਲ ਨਹੀਂ , ਸਗੋਂ ਇੱਕ ਦੂਜੇ ਦੇ ਪੂਰਕ ਹਨ। ਪ੍ਰੰਤੂ ਇਤਿਹਾਸਕ ਬਿਖ਼ਰ ਗਿਆ। ਆਰਥਿਕ ਸਾਧਨਾਂ 'ਤੇ ਮਰਦ ਦੀ ਅਜ਼ਾਰੇਦਾਰੀ ਕਾਇਮ ਹੋਣ ਨਾਲ ਤੇ ਬੋਸ਼ਣ ਤੇ ਰਾਜਨੀਤੀਆਂ ਇਸ ਚਿੰਤਨ ਦੇ ਕੇਂਦਰੀ ਮੁੱਦੇ ਹਨ। ਮਰਦ ਤੇ ਔਰਤ ਨਾਗੇਵਾਦ ਦਾ ਸੰਕਲਪ ਹੀ ਰਿਹਾ। ਨਾਗੇਵਾਦ ਦੇ ਸੰਕਲਪ ਦੀ ਪਰਿਭਾਸ਼ਾ ਸਪੱਸ਼ਟ ਤੇ ਚਿੰਤਨ ਹੋਂਦ ਵਿੱਚ ਆਏ। ਉਹਨਾਂ ਵਿੱਚ ਸਭ ਤੋਂ ਵਧੇਰੇ ਤੀਬਰ ਤੇ ਪ੍ਭਾਵਸ਼ਾਲੀ ਵਿਕਾਸ ਦੇ ਪੜਾਵਾਂ ਵਿੱਚੋਂ ਗੁਜ਼ਰਦਿਆਂ ਅਤੇ ਉਤਪਾਦਨ ਦੇ ਸਾਧਨਾਂ 'ਤੇ ਮਰਦ ਸਿਧਾਂਤ ਹੈ ਜਿਸ ਅਧੀਨ ਨਾਰੀ ਦੀ ਹੋਂਦ, ਸਥਿਤੀ, ਨਾਰੀ-ਦੇਹ ਅਧਾਰਿਤ ਅਸਮਾਨਤਾ ਕਰਦਿਆਂ ਜੇ ਡੂੰਘੇ ਤੌਰ 'ਤੇ ਵਾਚਿਆ ਜਾਵੇ ਤਾਂ ਇਹ ਲਿੰਗ ਅਧਾਰਿਤ ਚਿੰਤਨ ਜਾਂ ਆਧੁਨਿਕ ਦੌਰ ਵਿੱਚ ਵੀਹਵੀਂ ਸਦੀ ਵਿੱਚ ਪ੍ਵੇਸ਼ ਕਰਿਦਆਂ ਜਿਹੜੇ ਨਵੇਂ ਸਿਧਾਂਤ

ਉਸਨੇ ਔਰਤ ਨੂੰ ਆਪਣੇ ਅਧੀਨ ਰੱਖਿਆ ਹੈ। ਕਾਨੂੰਨ ਦੀਆਂ ਨਿਯਮਾਂਵਲੀਆਂ ਵੀ ਅਧਿਕਾਰ ਆਪਣੇ ਹੱਥਾਂ ਵਿਚ ਲੈ ਲਏ ਅਤੇ ਇਹਨਾਂ ਅਧਿਕਾਰਾਂ ਦੇ ਬਲ ਨਾਲ ਹੀ ਔਰਤ ਦੇ ਵਿਰੁੱਧ ਤਿਆਰ ਕੀਤੀਆਂ ਗਈਆਂ ਜਿਸਨੇ ਔਰਤ ਦੀ ਵੱਖਰਤਾ ਨੂੰ ਸਥਾਪਿਤ ਇਹ ਦਰਸਾਉਂਦਾ ਹੈ ਕਿ ਪਿੱਤਰੀ-ਸਮਾਜ ਦੇ ਮੁਢਲੇ ਸਮੇਂ ਤੋਂ ਹੀ ਮਰਦ ਨੇ ਸਾਰੇ ਨਿੱਗਰ Simone de Beauvoir ਇਸ ਬਾਰੇ ਤੱਥ ਸਪੱਬਟ ਕਰਦੀ ਹੋਈ ਲਿਖਦੀ ਹੈ:ਇਤਿਹਾਸ

ਨਾਰੀਵਾਦ : ਵਿਭਿੰਨ ਪਰਿਪੇਖ / 44

Ruseauch Paper Ichaplin published in Book

ਵੀ ਅਨੁਕੂਲ ਸੀ। 1 ਸੀ, ਉੱਥੇ ਮਰਦ ਤੱਤ-ਸ਼ਾਸਤਰ (Ontololgy) ਅਤੇ ਨੈਤਿਕ (Moral) ਆਡੰਬਰ ਲਈ ਕੀਤਾ। ਇਹ ਵਿਵਸਥਾ ਜਿੱਥੇ ਮਰਦ ਦੇ ਆਰਥਿਕ ਹਿੱਤਾਂ ਦੀ ਸੁਰੱਖਿਆ ਲਈ ਅਨੁਕੂਲ

ਵਾਲਾ ਵਿਹਾਰ ਕੀਤਾ ਜਾਂਦਾ ਰਿਹਾ। ਇਸੇ ਵਜ੍ਹਾ ਕਾਰਨ ਔਰਤ ਆਪਣੀ ਬਣਦੀ ਕਰਕੇ ਸ਼ਾਇਰ ਔਰਤਾਂ ਨਾਲ ਜੋੜ ਕੇ ਪੇਸ਼ ਕਰਨ ਦੀ ਕੋਸ਼ਿਸ਼ ਕੀਤੀ ਹੈ। ਵਿਸ਼ਵ ਕਵਿਤਾ ਪਰਚੇ ਵਿਚ ਨਾਰੀਵਾਦ ਦੇ ਚਿੰਤਨ ਨੂੰ ਪ੍ਰਾਚੀਨ ਕਾਲ ਦੀਆਂ ਔਰਤ ਲੇਖਕਾਵਾਂ ਖਾਸ ਦੇ ਮੁਕਾਬਲੇ ਤੁੱਛ–ਨਿਮਨ ਅਤੇ ਕਾਮ-ਵਸਤੂ ਦੇ ਰੂਪ ਵਿਚ ਪਰਿਭਾਬਿਤ ਹੋਈ। ਹਥਲੇ ਕੂਮਿਕਾ ਨਿਭਾਉਣ ਤੋਂ ਅਸਮਰੱਥ ਰਹੀ ਹੈ। ਚਿੰਤਨ ਅਤੇ ਅਮਲ ਦੇ ਸਾਰੇ ਮਸਲੇ ਤੇ ਰੂਪ ਆਪਣੀ ਗੱਲ ਕਰਾਂਗੇ। ਨਾਰੀ ਦਾ ਬਿੰਬ ਤਾਂ ਕਵਿਤਾ ਵਿਚ ਆਦਿ ਕਾਲ ਤੋਂ ਹੀ ਹੈ। ਨਾਗੈਵਾਦੀ ਚਿੰਤਨ ਨੂੰ ਪ੍ਰਾਚੀਨ ਕਾਲ ਤੋਂ ਲੈ ਕੇ ਸਥਾਪਿਤ ਸ਼ਾਇਰਾਵਾਂ ਦੇ ਜ਼ਰੀਏ ਕੇਵਲ ਕਵਿਤਾ ਹੀ ਨਹੀਂ ਸਗੋਂ ਇਸ ਰਾਹੀਂ ਸਾਹਮਣੇ ਆਏ ਚਿੰਤਨ ਬਾਰੇ ਵੀ। ਅਸੀਂ ਵਿਚ ਅੱਜ ਦਾ ਦੌਰ ਜਾਂ ਅੱਜ ਦਾ ਯੁੱਗ ਨਾਰੀ ਕਾਵਿ ਦੇ ਖੇਤਰ ਵਿਚ ਚਰਚਾ ਵਿਚ ਹੈ, ਮਰਦ ਪ੍ਰਧਾਨ ਸਮਾਜ ਦੁਆਰਾ ਹੀ ਨਿਰਧਾਰਿਤ ਕੀਤੇ ਗਏ ਜਿਸ ਅਧੀਨ ਔਰਤ ਮਰਦ ਅਧਣੀ ਵੱਖਰੀ ਹੋਂਦ ਰੱਖਦੀ ਸੀ? ਅਸਲ ਸਵਾਲ ਇਹੀ ਹੈ। ਇਸ ਬਾਰੇ ਫ਼ੌਕ Simone ਬਣਾਇਆ ਗਿਆ ਹੈ। ਪਰ ਕੀ ਨਾਗੀ ਅਸਲ ਵਿਚ ਜਾਗੀਰੂ ਸਿਸਟਮ ਵਿਚ ਇੱਕ ਪੰਜਾਬੀ ਕਵਿਤਾ ਵਿੱਚ ਵੀ ਸ਼ੁਰੂ ਤੋਂ ਹੀ ਨਾਰੀ ਦੇ ਬਿੰਬ ਨੂੰ ਕਵਿਤਾ ਦਾ ਆਧਾਰ ਆਪਣੀ ਪੁਸਤਕ The Second Sex ਵਿਚ ਲਿਖਦੀ ਹੈ: ਇਸ ਤਰ੍ਹਾਂ ਪ੍ਰਾਚੀਨ ਬਾਲ ਤੋਂ ਹੀ ਔਰਤਾਂ ਨਾਲ ਵੱਖ-ਵੱਖ ਖੇਤਰਾਂ ਵਿੱਚ ਭੇਦ-ਭਾਵ

ਸਮਝਿਦਆਂ ਅਤੇ ਔਰਤ ਨੂੰ ਉਸਦੀ ਵਿਰੋਧੀ ਸਮਝਦਿਆਂ ਔਰਤ ਦੀ ਵਿਆਖਿਆ ਇਸ ਲਈ ਪੁਲਿੰਗ ਦੀ ਮੁਬਾਜੀ ਝੱਲਣੀ ਪੈਂਦੀ ਹੈ। 2 (Negative) ਧਰਵਾਂ ਵਾਂਗ ਨਹੀਂ, ਸਗੋਂ ਮਨੁੱਖੀ ਇਤਿਹਾਸ ਵਿਚ 'ਮਰਦ' ਨੂੰ ਨਿਰਪੇਖ ਨਿਰਪੋਖ ਮਨੁੱਖ ਦੇ ਪ੍ਰਸੰਗ ਵਿਚ ਕੀਤੀ ਜਾਂਦੀ ਹੈ। ਇਸਤਰੀ ਲਿੰਗ ਨੂੰ ਪਰਿਭਾਸ਼ਿਤ ਹੋਣ ਮਰਦ ਅਤੇ ਔਰਤ ਬਿਜਲੀ ਦੇ ਧਨਾਤਮਕ (Positive) ਅਤੇ ਰਿਣਾਤਮਕ

ਧਾਰਨਾ ਵਿੱਚੋਂ ਹੀ ਨਾਰੀਵਾਦ ਦਾ ਜਨਮ ਹੋਇਆ ਹੈ।ਅੱਜ ਨਾਰੀਵਾਦ ਇੱਕ ਮਹੱਤਵਪੂਰਨ ਝੱਲਦੀਆਂ ਆ ਰਹੀਆਂ ਹਨ। ਸਮਾਜ ਦਾ ਵਿਹਾਰ ਔਰਤ ਪ੍ਰਤੀ ਗਲਤ ਹੀ ਰਿਹਾ, ਇਸੋ ਮੂਲੋਂ ਹੀ ਰੱਦ ਕਰਦਾ ਹੈ ਜਿਹੜੀਆਂ ਲਿੰਗ-ਵੱਖਰਤਾ ਤੇ ਲਿੰਗ-ਵਿਤਕਰੇ ਦਾ ਕਾਰਨ ਹੋਰ ਤਰ੍ਹਾਂ ਨਾਲ ਮਰਦ ਦੇ ਬਰਾਬਰ ਹੈ। ਇਸੇ ਆਧਾਰ 'ਤੇ ਨਾਰੀਵਾਦੀ ਨਜ਼ਰੀਆ ਪਿੱਤਰੀ 'ਤੇ ਹੈ ਕਿ ਔਰਤ ਇੱਕ ਵਿਵੇਕਸ਼ੀਲ ਪ੍ਰਾਣੀ ਹੈ ਅਤੇ ਇੱਕ ਸੁਤੰਤਰ ਵਿਅਕਤੀ ਵਜੋਂ ਉਹ ਵਿਚਾਰਧਾਰਾ ਹੈ ਅਤੇ ਇਹ ਇੱਕ ਅੰਦੋਲਨ ਵੀ ਹੈ। ਵਿਚਾਰਧਾਰਾ ਵਿਚ ਜ਼ੋਰ ਇਸ ਗੱਲ ਸਮਾਜ ਦੀਆਂ ਉਹਨਾਂ ਸਾਰੀਆਂ ਰੀਤਾਂ, ਰੁਚੀਆਂ, ਮੁੱਲਾਂ, ਧਾਰਨਾਵਾਂ ਤੇ ਵਿਹਾਰਾਂ ਨੂੰ ਇਸ ਤਰ੍ਹਾਂ ਔਰਤ, ਔਰਤ ਹੋਣ ਦੇ ਨਾਤੇ ਸੰਗਿਠਤ ਸਮਾਜਿਕ ਬੇਇਨਸਾਫ਼ੀਆਂ ਨੂੰ

ਨਾਰੀਵਾਦ : ਵਿਭਿੰਨ ਪਰਿਪੇਖ / 45

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