Roli Budhwar

Educational Qualifications

2005	Ph.D., Environmental Sciences, Environmental Carcinogenesis Division, Industrial Toxicology Research - Centre, Lucknow & Lucknow University, Lucknow, India
1999	M.Sc, Environmental Sciences - Dr. R.M.L. Avadh University, Faizabad, India
1996	B.Sc., *Zoology, Botany, and Chemistry* - Dr. R.M.L. Avadh University, Faizabad, India

Professional Experience

April 2005 – March 2006	Post Doctoral Fellow, Toxicology and Cancer Risk Factors, Cancer Chemoprevention Group, German Cancer Research Centre, Heidelberg, Germany
Jan 2005-April 2005	Guest , Institute of Biochemistry II, University Hospital, Frankfurt, Germany
2002-2004	Senior Research Fellow Industrial Toxicology Research Centre. Lucknow, India
2000 – 2002	Research Fellow Industrial Toxicology Research Centre. Lucknow, India

Techniques Proficient In

Molecular Biology:

Isolation of DNA and RNA, PCR, Cloning, Transfection, Transformation techniques, Agarose Gel Electrophoresis, Single cell gel electrophoresis (Comet assay), Cytogenetic assays like chromosomal aberration and micronucleus assay, Flowcytometry for Cell cycle and ROS generation studies,

Biochemistry:

Routine biochemical techniques (HPLC, GLC, Spectrophotometry, Spectrofluorometry, Metal analyses using Atomic Absorption Spectrophotometer), FACS Analysis, enzymatic assays viz. antioxidative stress, Phase I & Phase II detoxification enzymes

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Proteomics:

SDS-PAGE, 2-D gel electrophoresis, Immunoprecipitation, Western blotting and Hybridization.

Animal work:

Handling of laboratory animals (mice & rat)

Cell Biology & **immunology**:

Cell & Tissue culture, maintaining cancer cell lines of different origin, ELISA, Isolation of PBL, Cell proliferations assay, Cell Transformation Assay for detection of chemical carcinogens

Projects Completed :

Dissertation at Pesticide Residue analysis Division, Industrial Toxicology Research Centre, Lucknow "Organochlorine pesticide residue analysis."

Project at Institute of Biochemistry II, University Hospital, Frankfurt, Germany. The Project focuses on signalling pathways in human platelets. Platelets are fascinating cells designed to seal injured blood vessels. They are also of central importance in pathological conditions such as the development of arterial thrombosis and antiplatelet drugs have become a mainstay of cardiovascular therapy. Platelets are equipped with a multitude of signalling molecules required for the control of platelet function.

Project at German Cancer Research Centre, (DKFZ) Heidelberg, Germany The Project focuses on evaluation of the chemopreventive potential of seaweeds extract while performing *invitro* studies to monitor a series of chemopreventive mechanism for various types of cancer.

In the project we are investigating the potential of seaweed extracts to modulate the intracellular antioxidant potential, effect on carcinogen metabolism, mechanism at the tumor promotion and progression, and also working additional model to monitor anti-inflammatory and antiproliferative effect (induction of cell differentiation and apoptosis) in human colon (HCT 116) and hepatoma (HUH 7) cancer cell lines.

Member of professional associations: Indian Association of Cancer Research

Awards and Fellowship:

Awarded Senior Research Fellowship by Council of Scientific and Industrial Research, Govt. of India.

Scientific Publications

1. L.P Srivastava**, Roli Budhwar** and R.B Raizada (2001): Organochlorine pesticide residue analyses in Indian Spices. Bulletin of environmental Contamination and Toxicology 67, 856-862.

2. **Roli Budhwar**, Vipin Behari, Neeraj Mathur, AK Srivastava and Sushil Kumar (2003): DNA-Protein crosslinks as a biomarker of exposure to solar radiation: a preliminary study in brick-kiln workers. Biomarkers 8, 162-166.

3. **Roli Budhwar** and Sushil Kumar (2005): Substantial inhibition of Chromate induced DNA-Protein Crosslink Formation *in vivo* by Alpha-Lipoic Acid. Environmental Toxicology and Pharmacology Volume 20, Issue 1, July 2005, Pages 246-249.

4. **Roli Budhwar** and Sushil Kumar (2005): Prevention of chromate induced oxidative stress by alpha lipoic acid. Indian J Exp Biol. 2005 Jun; 43 (6):531-5.

5. **Roli Budhwar**, Vipin Behari, Mohan Das and Sushil Kumar (2005): Exposure estimates of chromeplaters in India: an exploratory study. Biomarkers; July-august2005; 10(4):252-257.

Papers presented in Conferences/Symposia:

- Roli Budhwar, Vipin Bihari, Neeraj Mathur, A.K Srivastava and Sushil Kumar: "**DNA-Protein Complex: A Biomarker for monitoring exposure to Solar Radiation in Humans**" Presented in 89th session of Indian Science Congress scheduled at the University of Lucknow, India from January 3-7,2002.
- Roli Budhwar and Sushil Kumar. "**Prevention of chromium induced oxidative stress using alpha-Lipoic acid"** accepted for poster presentation in 22nd Annual Convention of the Indian Association for Cancer Research and International Symposium on Recent Advances in Cancer Causes and Control held at RCC Thiruvananthapuram, Kerala State, India from January 10-12, 2003.

Workshops Attended:

- Attended **Workshop on Advancements in application of Flow Cytometry** held at Industrial Toxicology Research Centre Lucknow from October 21-23, 2002

- Attended **Workshop on Research Methodology and Statistical Methods in Biomedical Research** held at Industrial Toxicology Research Centre Lucknow from July 26-28, 2004.

Proficiency in different software packages

1. Proficient in MS-Office.

2. Worked independently with statistical packages- SPSS

Personal details:

Date of birth:	November 20, 1976
Sex:	Female
Marital Status:	Married
Nationality:	Indian
Languages	Hindi, English- Fluently German- Basic

Address for Communication:

Maybach Str. 27
60433, Frankfurt
Germany
Tel: +49-(0)69-25616355
E-mail: rolibudhwar@yahoo.co.in

References

Dr. Sushil Kumar
Head
Environmental Carcinogenesis Section
Industrial Toxicology Research Centre
P.O. Box 80, M. G. Marg, Lucknow 226 001 INDIA
Tel (Lab): +91-522-222 0107 / 222 0207 (Ext. 311)
Tel (Res): +91-522-269 2852
Email: sushilkumar_itrc@hotmail.com
sushilkumar@itrc.res.in

Dr. Clarissa Gerhaeuser
Deutsches Krebsforschungszentrum (DKFZ) - German Cancer Research Center
Abteilung Toxikologie und Krebsrisikofaktoren (C010)
Im Neuenheimer Feld 280, 69120 Heidelberg, Germany
Tel.: 0049(0)6221/42-3306; Fax.: 0049(0)6221/42-3359
e-mail: c.gerhauser@dkfz.de

Albert Smolenski, MD
Institut für Biochemie II
Medizinische Fakultät der Universität Frankfurt
Theodor-Stern-Kai 7, Haus 75
60590 Frankfurt am Main GERMANY
Tel: +49-69-6301-5569
Email: smolenski@biochem2.de

Attached below are letter of references from:

Dr. Clarissa Gerhaeuser

Albert Smolenski, MD