




## Faculty Details proforma for DU Web-site

(PLEASE FILL THIS IN AND Email it to [websiteDU@du.ac.in](mailto:websiteDU@du.ac.in) and  
cc: [director@ducc.du.ac.in](mailto:director@ducc.du.ac.in))

Title	Dr.	First Name	C.S.	Last Name	Seth	Photograph
Designation		Assistant Professor				
Address		Dr. C.S. Seth Assistant Professor Department of Botany University of Delhi Delhi-110007				
Phone No	Office	011-27667573				
	Residence	House No. 88; Krishna Gali, Near Vijay Nagar, Delhi-110009				
	Mobile	09810841604				
Email		seth_bhu@yahoo.co.in				
Web-Page		www.du.ac.in				
Educational Qualifications						
Degree		Institution			Year	
Ph.D.		Jointly from CSIR-IITR and University of Lucknow			2008	
M.Phil. / M.Tech.						
PG		Banaras Hindu University, Varanasi (U.P.)			2003	
UG		Banaras Hindu University, Varanasi (U.P.)			2001	
Any other qualification		Qualified for CSIR-NET-JRF and GATE Exam (97.42%)			2003	
Career Profile						
Employer		Post	Salary	Duration (From)	Duration (to)	Nature of job
I.I.T.R. Lucknow (U.P.)	Govt.	CSIR-NET-JRF	8000/-	6.4.04	5.4.06	Research
I.I.T.R. Lucknow (U.P.)	Govt.	CSIR-NET-SRF	9000/-	6.4.06	8.5.08	Research
I.H.B.T. Palampur (H.P.)	Govt.	Scientist (Permanent)	15600-39100	9.5.08	21.09.12	Research
I.G.N.T.U. Amarkantak (M.P.)	Govt.	Assistant Professor (Permanent)	15600-39100	25.9.12	22.08.13	Research and teaching
University of Delhi	Govt.	Assistant Professor (Permanent)	15600-39100	23.8.13	Till Date	Research and teaching
Administrative Assignments						

-Member of the Plantation committee (I.G.N.T.U. Amarkantak (M.P.))
Areas of Interest / Specialization
<ul style="list-style-type: none"> <li>• Plant physiology and Biochemistry</li> <li>• Plant abiotic stress tolerance mechanisms</li> <li>• Climate Change</li> <li>• Carbon-Nitrogen metabolisms</li> <li>• Toxicological effects of heavy metal on plants and detoxification mechanisms</li> <li>• Phytoremediation</li> </ul>
Subjects Taught:
<ul style="list-style-type: none"> <li>• Plant physiology and Biochemistry</li> <li>• Environmental Science</li> </ul>
Research Guidance
<p>List against each head (If applicable)</p> <ol style="list-style-type: none"> <li>1. Supervision of awarded Doctoral Thesis</li> <li>2. Supervision of Doctoral Thesis, under progress: 01 (Deepak Kumar Singh)</li> <li>3. Supervision of awarded M.Phil dissertations</li> <li>4. Supervision of M.Phil dissertations, under progress: 01 (Ms. Durga Singh)</li> <li>5. Supervision of M.Sc. dissertation: 01 (Mr. Tinu Anand Kain)</li> </ol>
Publications Profile
<p>List against each head (If applicable) (as Illustrated with examples)</p> <ol style="list-style-type: none"> <li>1. Books/Monographs (Authored/Edited): <ul style="list-style-type: none"> <li style="text-align: center;"><b>C.S. Seth: MECHANISMS OF CADMIUM PHYTOEXTRACTION IN INDIAN MUSTARD: 2011: LAP LAMBERT Academic Publishing GmbH &amp; Co. KG, Germany. ISBN: 978-3-8443-2384-9</b></li> </ul> </li> <li>2. Research papers published in Refereed/Peer Reviewed Journals: <ul style="list-style-type: none"> <li>✓ P.K. Chaturvedi, <b>Chandra Shekhar Seth</b>, V. Misra. Sorption kinetics and leachability of heavy metal from the contaminated soil amended with immobilizing agent (humus soil and hydroxyapatite). Chemosphere <b>2006</b>; 64: 1109-1114.</li> <li>✓ S. Mishra, S. Srivastava, R.D. Tripathi, R. Kumar, <b>Chandra Shekhar Seth</b>, D.K. Gupta. Lead detoxification by Coontail (<i>Ceratophyllum demersum</i> L.) involves induction of phytochelatins and antioxidant system in response to its accumulation. Chemosphere <b>2006</b>; 65: 1027-1039.</li> <li>✓ <b>Chandra Shekhar Seth</b>, P.K. Chaturvedi, V. Misra. Toxic Effect of arsenate and cadmium alone and in combination on Giant Duckweed (<i>Spirodela polyrrhiza</i> L.) in response to its accumulation. Environmental Toxicology <b>2007</b>; 22: 539-549.</li> <li>✓ P.K. Chaturvedi, <b>Chandra Shekhar Seth</b> and V. Misra. Selectivity sequences and sorption capacities of phosphatic clay and humus rich soil towards the heavy metals present in Zinc mine tailing. Journal of Hazardous Material <b>2007</b>; 147: 698-705.</li> <li>✓ <b>Chandra Shekhar Seth</b>, P.K. Chaturvedi, and V. Misra. The role of phytochelatins and antioxidants in tolerance to Cd accumulation in <i>Brassica juncea</i> L. Ecotoxicology Environmental Safety <b>2008</b>; 71: 76-85.</li> </ul> </li> </ol>

- ✓ **Chandra Shekhar Seth**, V. Misra, L.K.S. Chauhan, R.R. Singh. Genotoxic effects of cadmium on the root meristem cells of *Allium cepa*: A Cytogenetic and Comet assay approach. *Ecotoxicology Environmental Safety* **2008**; 71: 711-716.
- ✓ V. Misra, A. Tiwari, B. Shukla, and **Chandra Shekhar Seth**. Effects of Soil Amendments on the Bioavailability of Heavy Metals from Zinc Mine Tailings. *Environmental Monitoring Assessment* **2009**; 155: 467-475.
- ✓ **Chandra Shekhar Seth**, V. Misra, R.R. Singh and Lello Zolla. EDTA-enhanced lead phytoremediation in sunflower (*Helianthus annuus* L.) hydroponic culture. *Plant and Soil* **2011**; 347: 231-242
- ✓ **Chandra Shekhar Seth**, V. Misra, and L.K.S. Chauhan. Accumulation, Detoxification and Genotoxicity of Heavy Metals in Indian Mustard (*Brassica juncea* L.). *International Journal of Phytoremediation* **2012**; 14: 1-13.
- ✓ **Chandra Shekhar Seth**. A review on mechanisms of plant tolerance and role of transgenic plant in environmental clean-up. *Botanical Review*. **2012**; 78: 32-62.
- ✓ **Chandra Shekhar Seth**, T. Remans, E. Keunen, M. Jozefczak, H. Gielen, K. Opdenakker, N. Weyens, J. Vangronsveld and A. Cuypers. Phytoextraction of Toxic Metals: a Central Role for Glutathione. *Plant Cell and Environment* **2012**; 35: 334-346.

- a) *Research papers published in Academic Journals other than Refereed/Peer Reviewed Journals*
  - b) *Research papers published in Refereed/Peer Reviewed Conferences*
  - c) *Research papers Published in Conferences/Seminar other than Refereed/Peer Reviewed Conferences*
3. *Other publications (Edited works, Book reviews, Festschrift volumes, etc.)*

#### Conference Organization/ Presentations (in the last three years)

List against each head(If applicable)

1. *Organization of a Conference*
2. *Participation as Paper/Poster Presenter*
  - ✓ Two days Internal **Auditor Training on Quality Management System** as per ISO 9001:2008 standard at CSIR-IHBT, Palampur (H.P.) on 1<sup>st</sup> and 2<sup>nd</sup> February, 2010.
  - ✓ Five days training programme only for scientists working in government sector was attended on **Climate Change and Carbon Mitigation from 6-10 September, 2010**. Training was sponsored by Department of Science and Technology and organized by Indian Council of Forestry Research and Education, Dehradun-248006.
  - ✓ Five days training programme only for scientists working in government sector was attended on **Research Methodology and Statistical Methods: Designing for Breakthroughs from 16-20 August, 2011**. Training was organized by CSIR-Human Resource Development Centre (HRDC), Ghaziabad (U.P.).

#### Research Projects (Major Grants/Research Collaboration)

- ✓ Worked as Co-PI in CSIR sponsored network projects entitled 'Exploring climate change and adaptation of species complexes' from 9/5/08 to 21/9/2012

#### Awards and Distinctions

- Awarded for DST sponsored **BOYSCAST** Fellowship in 2011
- Junior Research Fellowship (CSIR-NET-JRF) from 6 April 2004-5 April 2006
- Senior Research Fellowship (CSIR-NET-SRF) from 6 April 2006- 8 May 2008
- Evaluated and examined the Ph.D. thesis submitted by **Ms. Sowbiya Munner** scholar in Department of Biotechnology entitled '*Proteomic and Biochemical Investigations to Study the Response of Vigna radiate to Fe-deficiency and Cd-Stress*' under the supervision of Dr. Mohd Irfan Qureshi, Department of Biotechnology, Faculty of Natural Sciences, Jamia Millia Islamia University, New Delhi

#### Association With Professional Bodies

1. *Editing*

2. *Reviewing:*

**Reviewer of international journals: Chemosphere, Environmental and Experimental Botany, Environmental Toxicology, Ecotoxicology and Environmental Safety, Journal of Hazardous Material.**

3. *Advisory*

4. *Committees and Boards:*

- ✓ Worked as member of annual report committee in CSIR-IHBT, Palampur (H.P.)

5. *Memberships:*

- ✓ **Member of the ISEB (International Society of Environmental Botanist)**
- ✓ **Member of the AEB (Academy of Environmental Biology)**

6. *Office Bearer*

#### Other Activities

- ✓ Prepared a course syllabus entitled 'Plant responses under environmental stresses' for Ph.D. registering student in Academy of Scientific and Innovative Research (AcSIR)
- ✓ Prepared M.Sc. course syllabus in Environmental Sciences for Central University of Himachal Pradesh, Dharamshala (H.P.)

Signature of Faculty Member

- You are also requested to also give your complete resume as a DOC or PDF file to be attached as a link on your faculty page.