DWAIPAYAN SINHA

ASSISTANT PROFESSOR (BOTANY)

RESEARCH & DEVELOPMENT | INNOVATION & CHANGE

END-TO-END ADMINISTRATIVE OPERATIONS

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CORE COMPETENCIES

Strategic Planning & Execution

Research & Development

Academic Administration

Centre Operations

Institution Management

Laboratory Operations

Corporate Social Responsibility

Protocol Development

Process Improvement

Seminars, Workshops & Knowledge Sharing

Training and Development

Team Mentoring

AWARDS & RECOGNITIONS

- Credited with "Netaji Subhash Chandra Bose Excellence" Award by World Achievers Foundation, **2022**
- Conferred with "Environment Excellence" Award by International Foundation for Environment & Ecology, **2021**
- Received "Young Scientist Of The Year 2019" Award by International Foundation for Environment & Ecology, **2020**
- "Best Paper Presentation" Award, International Conference on Sustainable Environment & Healthcare (ICSEH), **2019**
- Acknowledged with "International Academy of Science & Research Excellence" Award, **2019**
- Commended for "CSIR Junior Research" Fellowship for Research, **2004**
- Awarded "Scholarship" for Pursuing "MSc" at Centre of Advanced Studies (Botany), University of Delhi, **2004**
- Graduation Rank Holder, **2002**
- Highest Marks in "Botany (H)", **2002**

EXECUTIVE SUMMARY

- **Innovative, and Result Oriented Professional** targeting at senior level assignments in Education Management & Administration and exploring parameters of Plant Science & Interdisciplinary domains with ability to navigate global education platforms
- **Developed strategies and implemented plans** to build the reputation of the organization and in achieving high standards of learner success, both academically and professionally
- **Deeply associated with outreach programs**, ethno-botanical survey, preparation of herbarium specimens as per protocols, identification of gymnosperms, and participated in various excursions & field trips
- **Highly proficient in** operation of HPLC and HPTLC, extracting plants and separation using column chromatography, screening of plants for antioxidant potential, microtome sectioning of plant specimens, histo-pathological sectioning of animal tissue, operation of thermo cycler
- **Presently actively involved in,** In-House projects related to Ethno-botany and Phyto diversity of several blocks of West Bengal
- **Forward thinking and innovative Professor**, with a strong track record of organizational development, and exceptional decision-making and problem-solving skills

PROFESSIONAL EXPERIENCE

GOVERNMENT GENERAL DEGREE COLLEGE, MOHANUR, PASCHIM MEDINIPUR, WEST BENGAL, INDIA

Assistant Professor (Botany) — April 2015 – Till Present

As per Government orders, joined as **"Officer-In-Charge"** *additional duty, and later on moved as* **"Assistant Professor (Botany)"** *after getting relieved from additional duties*

As Assistant Professor (Botany):

- **Imparted great contribution in** writing chapters, articles and papers in edited books and journals of international repute; content writing in niche of Plant & Environmental Science
- **Played a stellar role in** exploration of Phytodiversity & Ethno botanical knowledge of various blocks under different districts of West Bengal; examining sacred groves that are of special religious importance to a particular culture
- **Directed all aspects of** studying of Vegetation & Phyto Conservation Pattern in Heritage Sites of Kolkata; studies on Ethno-botanical use among Local Communities

As Officer-In-Charge:

- **Provided oversight and was actively involved in** college affiliation; construction of college building with state of art facilities; establishing college academically & infrastructure wise
- **Demonstrated exemplary expertise in** setting up of laboratories for the respective departments; opening of Biological Science Department (Botany, Physiology, Zoology); positioning of the Library cum Information Center with books and periodicals of international repute
- **Set a high standard of accomplishment in** introducing online admission system and smart classrooms; setting up of NSS unit in the college post approval of affiliating University

BIDHAN NAGAR COLLEGE, KOLKATA, WEST BENGAL, INDIA

Assistant Professor (Botany) — December 2008 – March 2015

CSIR-INDIAN INSTITUTE OF TOXICOLOGY RESEARCH, LUCKNOW, UTTAR PRADESH, INDIA

Senior Research Fellow (Herbal Research) — 2007 - 2008

CSIR-INDIAN INSTITUTE OF TOXICOLOGY RESEARCH, LUCKNOW, UTTAR PRADESH, INDIA

Junior Research Fellow (Herbal Research) — 2005 - 2007

MEMBER REVIEW/EDITORIAL BOARD

- **Review Panel of Plant Science Today (ISSN: 2348-1900)**
- **Reviewer of Journal of Pharmaceutical Research International (ISSN: 2456-9119)**
- **Editorial Board of Journal of Wildlife & Ecology (ISSN: 2663-4600)**
- **Reviewer of International Repute Journals**

MEMBER (SCIENTIFIC BODIES)

- **International Academy of Science & Research, Kolkata, West Bengal**
- **International Foundation for Environment & Ecology, Kolkata, West Bengal**
- **Botanical Society of Assam**
- **Probir Chatterji Research Foundation, Kolkata**
- **Indian Fern Society**

CHAIRPERSON

- **Chaired Academic Session in International Research Conference on "Recent Trends in Life Sciences", 2019**

EDUCATION CREDENTIALS

X-th, Patha Bhavan, Kolkata,West Bengal, India, **1997**

XII-th, Patha Bhavan, Kolkata,West Bengal, India, **1999**

Bachelors of Science (Botany Honors)
Presidency College, Kolkata, India, **2002**

Masters of Science (Botany)
(Plant Molecular Biology & Crop Genetics-Special Papers)
Delhi University, New Delhi, India, **2004**

Doctor of Philosophy (Botany)
CSIR-Indian Institute of Toxicology Research & Registered from Lucknow University,
Lucknow, India, **2014**

PERSONALITY TRAITS

- Leadership
- Proactive
- Multi Tasker
- Communicator

IT TOOLS & PROFICIENCY

- **MS Office** (Word, Excel, PowerPoint)
- IFMS and HRMS Software

PERSONAL DETAILS

Date of Birth: 28th May, 1980
Marital Status: Married
Nationality: Indian
Languages: English, Hindi and Bengali
Place: Kolkata, West Bengal, India

SEMINARS, CONFERENCES & SYMPOSIUM (PAPER PRESENTED)

Biennial General Meeting of Botanical Society of Assam & National Seminar on 'Biodiversity: Conservation and sustainable utilization for Atmanirbhar Bharat |June 3rd-4th, 2022
Organized: Department of Botany, Jawarharlal Nehru College, Boko, Kamrup, Assam.
Oral Presentation: Sinha D, Relevance of Biodiversity and Agriculture for Self-Reliant Nation

6th International Conference on Environment and Ecology | February 24th – 26th, 2020
Organized: International Foundation for Environment and Ecology, in collaboration with Confederation Of Indian Universities, New Delhi And Asian Biological Research Foundation, Prayagraj. Hosted At Department Of Botany and Centre for Environmental Science, University Of Allahabad, Prayagraj .
*Oral Presentation: **Sinha D,** Phytodiversity Pattern In Heritage Burial Grounds of Kolkata: A Prospective Carbon Sink Of Kolkata.*

International Symposium on Plant Taxonomy and Ethno botany | February 13th – 14th, 2020
Organized: Botanical Survey of India, Kolkata.
*Oral Presentation: **Sinha D,** Phytodiversity & conservational pattern of St John's church, Kolkata.*

International Seminar on Systematic Approach to Modern Sciences and its Philosophical Impacts | February 6th – 8th, 2020
Organized: Bajkul Milani Mahavidyalaya, Bajkul in Collaboration With Prabhat Kumar College, Contai, Purba Medinipur.
*Oral Presentation: **Sinha D,** Ayurveda down the ages: From Philosophy to Laboratory.*

National Conference on Science & Technology: Rural Development | January 20th – 21st, 2020
Organized: ISCA, Kolkata Chapter & Surendra Nath College, Kolkata.
*Oral Presentation: **Sinha D,** Chir Pine: A plant of Ethno botanical and medicinal importance.*

International Conference on Sustainable Environment & Healthcare (ICSEH)
December 21st – 22nd, 2019
Organized: Taraknath Podder Memorial Foundation In Collaboration With Centre For Disaster Preparedness And Management, Jadavpur University, Kolkata And Lincoln University, Malaysia.
*Oral Presentation: **Sinha D,** Bio prospection of antioxidant potential of Pinus roxburghii Sarg.*

National Seminar on Revisiting Indic Thought and Knowledge System: Historical Perspective November 9th – 10th, 2019
Organized: Maulana Abdul Kalam Institute of Asian Studies.
*Oral Presentation: **Sinha D,** Uses of herbs in Ayurvedic system of medicine: From antiquity to 21st Century.*

International Symposium on 'Trends in Plant Science Research' | February 15th – 16th, 2014
Organized: Centenary Celebration Committee, Department Of Botany, University of Kolkata. Sponsored By UGC & DST Purse.
*Poster: **Sinha D,** Kakkar P. Exploration of antioxidant properties from Pinus roxburghii Sarg.*

State Level Seminar on Impact of Pollution: Assessment and Awareness
February 14th – 15th, 2014
Organized: Department of Zoology, Hooghly Women's College and Sponsored by Department of Science and Technology, Government of West Bengal.
Oral Presentation: Sinha D, Adhikari D. Plants as an excellent tool for monitoring heavy metal pollution.

National Conference on Biodiversity: Issues, Concern And Future Strategies
January 16th – 18th, 2014
Organized: West Bengal Biodiversity Board, Department Of Environment, Government of West Bengal.
*Poster: **Sinha D**, Singh J, Kakkar P. Exploration of Genetic diversity of Pinus roxburghii Sarg.*

Seminar cum Workshop on Food Security and Genetically Modified Crops
September 20th, 2013
Organized: Department Of Botany, Ramkrishna Mission Vivekananda Centenary College, Rahara, Kolkata. Sponsored By West Bengal Council of Science & Technology & Catalysed and Supported By NCSTC, New Delhi.
*Poster Presentation: Kaur K, Bannerjee P, Bhattacharjee S, **Sinha D.** Genetically modified crops and its relevance to food security.*

SEMINARS, CONFERENCES & SYMPOSIUM (PAPER PRESENTED) Continued

UGC Sponsored National Level Seminar on "Botanical Resources and Human Welfare" | September 6th, 2013
Organized: Department Of Botany, Ramkrishna Mission Vivekananda Centenary College, Rahara, Kolkata in Collaboration With Department Of Botany, Brahmananda Keshab Chandra College, Kolkata.
Oral Presentation: ***Sinha D,*** *Kakkar P. Chirpine: A Potent source of natural antioxidant.*

SFFR STAR 2013: International Conference on Advances in Free Radicals, Redox Signaling and Translational Antioxidant Research & Xii Annual Meeting Of The Society For Free Radical Research-India | January 30th - February 1st, 2013
Organized: CSIR-IITR
Poster: ***Sinha D,*** *Singh J, Kakkar P. Exploration of antioxidant capacity of bark of Pinus roxburghii.*

76th Annual Meeting of Society of Biological Chemists, India | November 25th – 27th, 2007
Organized: Department Of Biochemistry, Sri Venkateshwara University, Tirupati.
Poster: ***Sinha D*** *& Kakkar P. Effect of ecological variation on antioxidant capacity & chemical constituents of Pinus roxburghii Sarg.*

SEMINARS, CONFERENCES & SYMPOSIUM (ATTENDED)

- State Level Seminar On Values Of Field Studies In Building Biodiversity Preception: Teaching Beyond Classroom. Organized By Department Of Zoology, Chandernagar Government College, Chandernagar, Hooghly | **September 13th, 2014**
- Prof. Satya Sundar Barman Memorial Lecture on: Biygyaner Itihash O Sastha Sochetonota O Sadharon Manush.(History Of Science And Health Consiousness And Common Man). Organized By Hooghly Mohsin College, Hooghly | **January 28th, 2014**
- UGC Sponsored National Seminar on Plant Science Research in Human Welfare. Organized By Bidhannagar College In Collaboration with Botanical Survey Of India | **January 11th - 12th, 2012**
- UGC Sponsored National Seminar on Stress, Drug Development & Nanoparticle. Organized By Bethune College, Kolkata | **March 5th- 6th, 2009**

SEMINARS ORGANIZED

- Secretary of International Webinar on World Of Plants: Its Impact on Indigenous People, Society & Biosphere | **November18th –19th, 2020**
- Member of the Organizing Committee of National Seminar on "Plant Science Research in Human Welfare", Organized By Bidhan Nagar College In Collaboration With Botanical Survey Of India | **January 11th – 12th, 2012**

WORKSHOPS ATTENDED

- Seven Days Online Training Programme on "Medicinal Plants". Organized By Ambika Prasad Research Foundation, Odhisha, India **December 5th – 12th, 2021**
- E-Workshop on "Systematic Literature Review". Organized by COMMACAD | **October 30th – 31st, 2021**
- Online Certificate Course on "Research Methodology". Organized By International Benevolent Research Foundation | **April 26th – 30th, 2020**
- Hands-On-Training on "Palaeobotanical & Palynological Techniques". Organized by University Of Calcutta | **April 21st – 28th, 2014**
- Workshop on "Plant Genomic DNA", Organized By Department Of Botany, Scottish Church College, Kolkata | **May 5th - 6th, 2009**

ORIENTATION PROGRAM & REFRESHER COURSE

- Orientation Programme organized By UGC - Academic Staff College, Jadavpur University | **August 4th - September 1st, 2014**
- Refresher Course On "Interdisciplinary Research Using Nano science And Nanotechnology", Organized by UGC - Academic Staff College, Jadavpur University | **September 3rd - 28th, 2015**
- Online Refresher Course on "Value of Education", Organized By HRDC, Gujarat University, Ahmedabad | **September 28th – October 11th, 2020**

FACULTY DEVELOPMENT PROGRAMS ATTENDED

- Online Faculty Development Programme on "Research Methodology And Scientific Tools" Organized: B.K. Birla Institute Of Engineering And Technology, Pilani, Rajasthan | **April 13th – April 15th, 2021**
- Online Faculty Development Programme on "Self Reliant India Mission" (Aatmanirbhar Bharat Abhiyan). Jointly Conducted: IQAC, UG And PG Department Of Commerce, Sree Ayyappa College For Women, Nagercoil, Kanyakumari, Tamil Nadu And Shiksha Sanskriti Utthan Nyas, Kanyakumari Region, Tamil Nadu | **July 20th – 24th, 2020**
- Online Faculty Development Programme on "Indigenous Knowledge Systems And Modern Education". Jointly Conducted By IQAC, UG and PG Department Of Commerce, Sree Ayyappa College For Women, Nagercoil, Kanyakumari, Tamil Nadu And Shiksha Sanskriti Utthan Nyas, Kanyakumari Region, Tamil Nadu | **May 25th - May 29th, 2020**

ONLINE LECTURES (INVITED SPEAKERS)

- Invited speaker on the occasion of "World Earth Day-2022" | **April 22nd , 2022**
  Organized: Government General Degree College, Lalgarh, Paschim Medinipur, West Bengal. Topic of Lecture: Pine Diversity of India and its Ethnobotanical Uses.
- Invited speaker on the occasion of "World Wildlife Week Celebration" | **October 10th, 2021**
  Organized: Government General Degree College, Lalgarh, Paschim Medinipur, West Bengal. Topic of Lecture: Climate change could cause abrupt biodiversity losses this century.
- Invited Speaker In Webinar On 'Knowing Beyond Knowledge' | **January 10th, 2021**
  Organized: Mangloi Radharani Girl High School in Collaboration with Subhash nagar Guru Sundari Balika Vidyabithi, Purba Medinipur, West Bengal, Topic of Lecture: Phytodiversity Loss.
- Speaker In National Webinar On 'Loss Of Biodiversity-Threat To Our Globe' | **December 8th , 2020**
  Organized: Boudh Panchayat College, Boudh, Odhisha. Topic of Lecture: Biodiversity Loss-Where Are We Heading.
- Speaker in International Webinar On "Yoga-The Holistic Approach To Physiological & Psychological Homoeostasis" | **October 17th –18th, 2020**
  Organized: Department Of Physiology, Government General Degree College, Mohanpur, Paschim Medinipur, In Collaboration With Physical Education Foundation Of India. Topic of Lecture: Yoga and Ayurveda- Two Sisters Of Healthy And Disease Free Life.
- Speaker In "Web Platform 4 Dialogue" | **September 26th, 2020**
  Topic: Ayurveda-A Traditional Approach Fortifying Human Health since Antiquity.

SEMINARS, CONFERENCES & SYMPOSIUM (INVITED LECTURES)

- Speaker In National Conference "Physiocon 2019"-An extension programe and Annual Conference Of The Physiological Society Of India On Recent Trends In Physiology And Healthcare Research For Salubrious Society | November 18th – 20th, 2022
  Topic: Forest and Human Health The role of terpenes for a disease free life.
- Speaker In International Research Conference On Recent Trends In Life Sciences | **November 28th – 29th, 2019**
  Organized: Department Of Botany, Sidho Kanho Birsa University, Purulia, West Bengal in Collaboration With International Academy Of Science And Research, Kolkata, Topic: Bio prospection Of Pinus Roxburghii Sarg. As Source Of Antioxidants and Source of Medicine.
- Speaker in National Conference "Physiocon 2019" and Annual Conference Of The Physiological Society Of India On 'Recent Trends In Physiology And Healthcare Research For Salubrious Society | **November 15th – 17th, 2019**
  Topic: Cancer: Current Scenario And Possible Remedy Through Polyphenols.
- Speaker In International Seminar On Global Challenges On Food And Environment | **April 8th, 2019**
  Organized: Department Of Nutrition and Physiology, Belda College, Belda, Paschim Medinipur, West Bengal, India, Topic: Present Day World And Carcinogenesis: A Possible Remedy Through Natural Products.

WEBINARS (PAPERS PRESENTED)

- Two Day International Webinar on "Trends In Zoological Research"
  Organized By Department Of Zoology, University of Kalyani, Kalyani, Nadia, West Bengal
  *Poster: **Sinha D** & Singh A. History of Pollution and Toxicity-From antiquity to present.*

WEBINARS (ATTENDED)

- "National Webinar On Integration Of Ecosystem And Biodiversity Values Into National And Local Developmental Planning" Organized By Department Of Botany, Sidho-Kanho Birsa University, Purulia, West Bengal | **May 22nd, 2021**
- "National Webinar on Cancer Microenvironment in Context of Stem Cell and Targeted Therapy", Organized By Nabadwip Vidyasagar College Nabadwip, Nadia, West Bengal | **June 27th, 2020**
- "National Webinar On Biodiversity And Man", Organized By Department Of Botany, Dyal Singh College, University Of Delhi, in Collaboration With Society For Ecological Research And Natural Resources Management (SERNRM) | **June 5th, 2020**
- "International Webinar On Trajectory Of Covid-19 Pandemic: Awareness, Treatment and Genomic Insight For Future Development", Organized By Department Of Microbiology, Bankura Sammilani College, Bankura, West Bengal | **June 14th - 15th, 2020**
- "International Webinar on Biotechnology', Organized By Algappa University, Karaikudi, Tamilnadu | **May 31st - 2nd June, 2020**
- "Webinar on Antiviral Marine Macroalgae Sulfated Polysaccharides to Boost Immunity As Well As Active against Respiratory Infections", Organized By PG & Research Department of Botany, V. O. Chidambaram College | **May 27th, 2020**

PUBLICATIONS (RESEARCH PAPER & ARTICLES)

- Sinha, D., Maurya, A. K., Abdi, G., Majeed, M., Agarwal, R., Mukherjee, R., Ganguly, S., Aziz, R., Bhatia, M., & Majgaonkar, A. (2023). Integrated genomic selection for accelerating breeding programs of climate-smart cereals. *Genes*, *14*(7), 1484. https://www.mdpi.com/2073-4425/14/7/1484#

- Soni, R., Prakash, G., Sharma, S., Sinha, D., & Mishra, R. (2023). Role of microbes in alleviating abiotic stress in plants. *Plant Science Today*. https://doi.org/10.14719/pst.2215

- Sinha, D., Datta, S., Mishra, R., Agarwal, P., Kumari, T., Adeyemi, S. B., Kumar Maurya, A., Ganguly, S., Atique, U., & Seal, S. (2023). Negative Impacts of Arsenic on Plants and Mitigation Strategies. *Plants*, *12*(9), 1815. https://doi.org/10.3390/plants12091815

- Dorjey, K., Maurya, A. K., & Sinha, D. (2022). Dactylorhiza hatagirea (D. Doon) Soo, an important medicinal herb of the Himalaya and urgent need for its conservation- A review. *Indian Journal of Natural Products and Resources*, *13*(3), 265–273. https://doi.org/10.56042/ijnpr.v13i3.58263

- Chowdhury, S., Datta, A., Ferdous, M.-E.-M., & Sinha, D. (2022). Genetic Transformation of Arachis hypogaea Using Novel Genes Conferring Fungal Resistance-A Review. *Plant Science Today*. https://doi.org/10.14719/pst.1504

- Sinha, S., Singh, A., Sinha, D., & Chatterjee, R. (2021). A Review on Bryophytes as Key Bio-indicators to Monitor Heavy Metals in the Atmosphere. *INTERNATIONAL JOURNAL OF PLANT AND ENVIRONMENT*, *7*(01), 49–62. https://doi.org/10.18811/ijpen.v7i01.5

- Maurya, A. K., & Sinha, D. (2020). Nitric Oxide as a Savior Molecule Against Stress Induced by Chromium and Cadmium. *INTERNATIONAL JOURNAL OF PLANT AND ENVIRONMENT*, *6*(04), 253–263. https://doi.org/10.18811/ijpen.v6i04.03

- Sinha, D. (2020a). *A REVIEW ON TAXANES: AN IMPORTANT GROUP OF ANTICANCER COMPOUND OBTAINED FROM TAXUS SP*. *11*(5), 1969–1985. http://dx.doi.org/10.13040/IJPSR.0975-8232.11(5).1969-85

- Sinha, D. (2020b). Ethnobotanical and pharmacological importance of Taxus wallichiana Zucc. *Plant Science Today*, *7*(1), 122–134. https://doi.org/10.14719/pst.2020.7.1.636

- Sinha, D. (2020c). Role of different polyphenols in the treatment of cancer disease. *Asian Journal of Pharmacy and Pharmacology*, *6*(1), 1–19. https://doi.org/10.31024/ajpp.2020.6.1.1

- Sinha, D. (2019c). Ethnobotanical and Pharmacological Importance of Western Himalayan Fir Abies pindrow (Royle ex D. Don) Royle: A Review. *Journal of Pharmaceutical Research International*, *31*(6), 1–14. https://doi.org/10.9734/jpri/2019/v31i630360

- Sinha, D. (2019d). PHARMACOLOGICAL IMPORTANCE OF POLYPHENOLS: A REVIEW. *International Research Journal Of Pharmacy*, *10*(9), 13–23. https://doi.org/10.7897/2230-8407.1009255

- Sinha, D. (2019a). A Review on Ethnobotanical, Phytochemical and Pharmacological Profile of Pinus wallichiana A.B. Jacks. *Pharmacognosy Journal*, *11*(4), 624–631. https://doi.org/10.5530/pj.2019.11.100

- Sinha, D. (2019b). A REVIEW ON PHYTOCHEMICAL, ETHNOBOTANICAL, PHARMACOLOGICAL, AND ANTIMICROBIAL IMPORTANCE OF CEDRUS DEODARA (ROXB. EX D. DON) G. DON. *International Journal of Green Pharmacy*, *13*(1). https://doi.org/10.22377/ijgp.v13i01.2331

- Sinha, D. (2018). Importance of Cedrus deodara (Roxb. Ex D. Don) G. Don: A review of its ethnobotany, phytochemical constituents and antioxidant potential. *RESEARCH IN ENVIRONMENT AND LIFE SCIENCES*, *11*(7), 189–195.

- Sinha, D., & Tandon, P. K. (2018). Ethnobotanical, Pharmacological and Antimicrobial Importance of Pinus roxburghii Sargent: A Review. *Journal Of Biological And Chemical Research*, *35*(2), 605–622.

- Sinha, D., Singh, J., Tandon, P., & Kakkar, P. (2013). Genetic diversity of Pinus roxburghii sarg. Collected from different Himalayan regions of India assessed by random amplified polymorphic DNA analysis. *Toxicology International*, *20*(3), 208. https://doi.org/10.4103/0971-6580.121667

PUBLICATIONS - CHAPTERS IN EDITED BOOKS

- Murad Muhammad, S. B., Vishal Hivare, Wen-JunLi, Abdul Waheed, Dwaipayan Sinha. (2024). Bioremediation techniques—Classification, principles, advantages, limitations, and prospects. In *Microbiome-Assisted Bioremediation Rehabilitating Agricultural Soils* (pp. 1–23). Academic Press. https://www.sciencedirect.com/science/article/abs/pii/B9780443219115000039?via%3Dihub

- Mukherjee, A., Hazra, A., Sinha, D., Cheguri, P., B, S. H., Ghosh, S., Bomma, N., Kundu Chaudhuri, R., Gangashetty, P. I., & Chakraborti, D. (2023). Grain Micronutrients in Pigeonpea: Genetic Improvement Using Modern Breeding Approaches. In C. Kole (Ed.), *Compendium of Crop Genome Designing for Nutraceuticals* (pp. 747–774). Springer Nature Singapore. https://doi.org/10.1007/978-981-19-4169-6_28

- Bhattacharya, R., Bhattacharya, R., Majeed, M., Bhandari, S., Aziz, R., Sinha, D., Mondal, A., & Sen Niyogi, S. (2023). Environmental Rehabilitation of Industrial Waste Dumping Site. In *Biohydrometallurgical Processes* (p. 46). CRC Press. https://www.taylorfrancis.com/chapters/edit/10.1201/9781003451457-4/environmental-rehabilitation-industrial-waste-dumping-site-ratul-bhattacharya-roumi-bhattacharya-muhammad-majeed-somya-bhandari-robina-aziz-dwaipayan-sinha-ayan-mondal-subhamita-sen-niyogi?context=ubx&refId=9c639467-ebc6-4fd4-8b88-1cf99da73f5b

- Ganguly, S., Basuli, D., Chatterjee, M., Seal, S., Sinha, D., & Chowdhury, S. (2023). Sustainability of Aromatic Plants in Remediation of Cadmium from Contaminated Sites. In *Phytoremediation Potential of Medicinal and Aromatic Plants* (pp. 116–138). CRC Press. https://www.taylorfrancis.com/chapters/edit/10.1201/9781003290780-10/sustainability-aromatic-plants-remediation-cadmium-contaminated-sites-sharmistha-ganguly-debapriya-basuli-moumita-chatterjee-sanchita-seal-dwaipayan-sinha-shahana-chowdhury

- Sinha, D., Tandon, P. K., Banerjee, S., Chatterjee, C., Muhammad, M., Chowdhury, S., & Chatterjee, M. (2023). Phytoremediation of Arsenic: An Overview. In *Phytoremediation Potential of Medicinal and Aromatic Plants* (pp. 172–193). CRC Press. https://www.taylorfrancis.com/chapters/edit/10.1201/9781003290780-13/phytoremediation-arsenic-dwaipayan-sinha-pramod-kumar-tandon-swastika-banerjee-chitrita-chatterjee-murad-muhammad-shahana-chowdhury-moumita-chatterjee

- Sharmistha Ganguly, M. C., Sanchita Seal, Debapriya Basuli, Dwaipayan Sinha, Murad Muhammad. (2023). The Disaster of Air Pollution: Causes, Impact and Mitigation Strategies. In *Sustainable Disaster Managament and Human Health* (pp. 169–208). Nova Science Publisher. https://novapublishers.com/shop/sustainable-disaster-management-and-human-health/

- Dwaipayan Sinha, S. C., Somnath Kar, Sharmistha Ganguly, Shilpi Sharma, Shahana Chowdhury. (2023). The Disaster of Water Pollution by Heavy Metals: A New Perspective on the Risks, and Unique and Sustainable Remedial Techniques. In *Sustainable Disaster Managament and Human Health* (pp. 209–267). Nova Science Publisher. https://novapublishers.com/shop/sustainable-disaster-management-and-human-health/

- Sinha, D., Chatterjee, M., Choudhury, S., Seal, S., Das, T., Sharma, S., Banerjee, S., & Chowdhury, S. (2023). Terpenes and Terpenoids: Potent Antiviral Agents Against SARS-CoV-2. In *Bioactive Compounds Against SARS-CoV-2* (pp. 94–110). CRC Press. https://www.taylorfrancis.com/chapters/edit/10.1201/9781003323884-8/terpenes-terpenoids-dwaipayan-sinha-moumita-chatterjee-srijonee-choudhury-sanchita-seal-tapas-das-shilpi-sharma-swastika-banerjee-shahana-chowdhury

- Atique, U., Altaf, M., Sinha, D., Ghazanfar, S., Haque, M. A., & Chowdhury, S. (2023). The Role of Probiotics and Prebiotics in Gut Modulation. *The Gut Microbiota in Health and Disease*, 205–216. https://doi.org/10.1002/9781119904786.ch18

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