

Curriculum Vitae

Personal Information:

Name- **Dr. Biswanath Das**

Home Address- Brotorps Allé 3, Sundbyberg, Lgh 1101, Stockholm 17441, Sweden

Contact no: +46736002256

Current Employment- Permanent researcher at Stockholm University (Organic Chemistry)

Current workplace Address- Stockholm University, SE 10691, Sweden



Having experience (over 9 years) in managing multiple and interdisciplinary projects related to renewable energy, carbon capture-conversion, and PFAS remediation. Having expertise in organic-inorganic catalysts-materials synthesis, electrocatalysis, anodes and cathodes design, and analytical techniques (GC-MS, ESI-MS, FTIR, NMR, UV-Vis, etc.) for catalysis and product quality analysis. Fluent in English (reading, writing, and speaking), basic level in Swedish (completed SFI national test), enjoy public speaking, team working, networking, and new challenges.

Previous Employments:

UNSW School of Chemistry, Australia

02/2019 – 05/2020

Post-Doctoral Research Associate position

Homogeneous–Heterogeneous CO₂ reduction, Hydride–dihydrogen complexes, C-F & C-H bonds activation

This position involves co-mentoring of one honors student and one Ph.D. student.

Supervisor: A/Prof. Graham E Ball & Prof. Naresh Kumar

UNSW School of Chemistry, Australia

06/2016 – 12/2018

Post-Doctoral position

Homogeneous CO₂ reduction & Water oxidation

This position involved co-mentoring of one honors student and four Ph.D. students.

Supervisor: A/Prof. Stephen B. Colbran

Uppsala University, Sweden

01/2014 – 05/2016

Post-Doctoral position

Homogeneous Water oxidation

This position involved co-mentoring of two master's students.

Supervisors: Prof. Sascha Ott and Dr. Anders Thapper

Higher education degrees:

Doctoral Studies (PhD)

09/2009 – 02/2014

Lund University, Sweden

Hydrolytic and oxidative catalytic activities of bio-inspired di-nuclear metal complexes

Supervisor: Prof. Ebbe Nordlander

Master's Degree in Chemistry

08/2007 – 08/2009

Indian Institute of Technology (IIT), Kanpur, India

Synthesis, structure and photo-physical properties of phosphorus-supported fluorescent probes

Project Supervisor: Prof. Vadapalli Chandrasekhar

Bachelor's Degree in Chemistry

04/2004 – 06/2007

Suri Vidyasagar College, Burdwan University, India

Curriculum Vitae

Experienced in:

Organic and inorganic synthesis	Water splitting & CO ₂ reduction
Molecular catalysts, Electrode design	Electrochemistry and catalysis
PFAS removal techniques	DFT calculation on small molecules
C-H bond activation / Alkenes oxidation	Spectroscopic analysis and mechanistic investigation

Overview of publications record:

Total number of publications	36
International patent	1
First author publications	20
Corresponding author publications	10
Total number of citations	> 650 (Google Scholar, June 2023)
H – index/i10 – index	14/17 (Google scholar)

Complete list:

<https://scholar.google.com.au/citations?user=xl8i7FgAAAAJ&hl=en&authuser=1>

Applicant/Co-applicant in successful grant applications:

- (i) **MWAC Grant:** SC-XRD Detector Upgrade (RG163130)] (2017-2020) at UNSW, Sydney (with Dr. Christopher Marjo and team) (250,000 AUD)
- (ii) **Futura foundations** (2020-2023) at Stockholm University (with Prof. Björn Åkermark, Dr. Oscar Verho, and A/Prof. Markus D Kärkäs) (2830,000 SEK)
- (iii) **ÅForsk foundations** (2021-2023) at KTH and Stockholm University (with Prof. Joydeep Dutta and Prof. Björn Åkermark) (999,220 SEK)
- (iii) **Futura foundations** (2023-2026) (individual grant) at Stockholm University (3075,000 SEK)

Invited talks, oral presentations, awards, and cover-arts:

Invited talks –at Macquarie University, 2019 April, Sydney, Australia; at IPRI 2018 September, Wollongong, Australia;

Oral presentations – GREN2023 (Dresden, Germany); ISHHC 2018 (Sydney, Australia); ICCS 2018 (Sendai, Japan); Swedish CAP meeting 2014 (Uppsala, Sweden), 2015 (Stockholm, Sweden); IRTG Biometals 2011 (Goslar, Germany)

Chartered Member of RACI (Royal Australian Chemical Institute) (2019-2021) (Membership No. 59220)

Ongoing projects got selected on **IVA's 100-list 2023** (Swedish innovations with great potential)

Awarded *Junior Research Fellowship* (JRF), India (through the NET exam), in 2009

Awarded *Erasmus Mundus Ph.D. Fellowship*, Lund University, Sweden in 2009

Awarded a *post-doctoral fellowship* at Uppsala University, Sweden, in 2014

Awarded a *post-doctoral fellowship* at the School of Chemistry, UNSW, Australia, in 2016

Invited cover in *Account of Chemical Research* (corresponding author) in 2021 (DOI: 10.1021/acs.accounts.1c00298)

Invited front-cover in *Dalton Transaction* (corresponding author) in 2019 (doi: 10.1039/C8DT04858D)

Invited Inside Cover in *Chemical Communications* in 2015 (doi:10.1039/C5CC04148A)

Teaching:

Organic Chemistry – Reactivity and Structure KO5001 (from 2022) (as a lecturer) at Stockholm University

Organic Chemistry – Basic Principles KO2003 (from 2023) (as a lecturer) at Stockholm University

Coordination Chemistry KEMM22 (2010-2014) (as lab instructor) at Lund University

Supervising bachelor, master, PhD students, and postdoctoral candidates (from 2016, in Australia & Sweden)

List of supervised/co-supervised students:

- (i) Rima Hindy and Helen Hagos (Bachelor project student, 2022-2023), Stockholm University
- (ii) Jamal El-Abid (Post-doctoral candidate, 2023-2025, ongoing), Stockholm University, Sweden.
- (ii) Maryam Mirabediny (Ph.D. student under Prof. Naresh Kumar, 2020-2024, ongoing), UNSW, Australia
- (iii) Jun Sun (Ph.D. student under Prof. Naresh Kumar, 2019-2023, ongoing), UNSW, Australia
- (iv) Dejan Mizdrak (Master's project student under Prof. Graham E Ball, 2019), UNSW, Australia
- (v) Gabriella Chalmers (Master's project student under Prof. Stephen B Colbran, 2018-2019), UNSW
- (vi) Lida Ezzedinloo (Ph.D. student under Prof. Stephen B Colbran, 2016-2020), UNSW, Australia
- (vii) Michael Marquardt (Master's project student 2015-2016), Uppsala University, Sweden
- (viii) Ricardo Fernandez (Master's project student, 2014-2015), Uppsala University, Sweden

Reviewing articles for:

- (i) Nature Communications; (ii) Environmental Science & Technology; (iii) ChemCatChem; (iv) Chemistry-A European Journal; (v) Dalton Transactions.

References:

Prof. Em. Björn Åkermark, Department of Organic Chemistry, Stockholm University, Stockholm 10691, Sweden. Email: Bjorn.Akermark@su.se

Prof. Naresh Kumar, School of Chemistry, UNSW, Sydney, Australia. E-mail: n.kumar@unsw.edu.au

Prof. Sascha Ott, Department of Chemistry-Ångström Laboratory, Uppsala University, P.O.Box 523,75120 Uppsala, Sweden. E-mail: sascha.ott@kemi.uu.se

Prof. Ebbe Nordlander, Chemical Physics Department; Kemicentrum; Getingevägen 60, Lund S-22241, Sweden. Email: ebbe.nordlander@chemphys.lu.se

A/Prof. Anders Thapper, Department of Chemistry-Ångström Laboratory, Uppsala University, P.O.Box 523, 75120 Uppsala, Sweden. E-mail: anders.thapper@kemi.uu.se

A/Prof. Graham Ball, School of Chemistry, UNSW, Sydney, Australia. E-mail: G.Ball@unsw.edu.au

A/Prof. Stephen B Colbran, School of Chemistry, UNSW, Sydney, Australia. E-mail: s.colbran@unsw.edu.au

Prof. Franc Meyer, Institut für Anorganische Chemie Georg-August-Universität Tammannstraße 4, 37077 Göttingen, Germany. E-mail: franc.meyer@chemie.uni-goettingen.de