

Dr. S. Tamil Selvan

Name: Dr. S. Tamil Selvan
Current Affiliation: Senior Research Consultant, Energy and Biotech Companies, Singapore
Ph.D.: Central Electrochemical Research Institute, Karaikudi, India (1992)
Post – Doc: Humboldt Fellow, University of Ulm, Germany (1995–1997) JSPS Fellow, Nagoya Institute of Technology, Japan (1997–1999) Research Fellow, University of Melbourne, Australia (2000–2002)
Previous academic positions held: Adjunct Associate Professor at NUS - A*STAR Singapore (2003-2016) Visiting Professor at Myongji University and KIST (Korea, 2017–2018),
Research Interests: Multifunctional nanoparticles for biomedical, energy and Applications

Journal articles > 100, **h-index** –43 [Scopus]; Citations > 8000, **Patents:** 07(granted),

Brief CV:

Dr. Subramanian Tamil Selvan is a distinguished scientist with a Ph.D. in Chemistry from Madurai Kamaraj University (1992), earned through research at CECRI, Karaikudi. With over 30 years of expertise in nanomaterials for energy, environmental, and biomedical applications, he currently serves as a Senior Research Consultant and Scientific Writer, supporting global scientific initiatives. He is a recipient of prestigious postdoctoral fellowships including the Alexander von Humboldt (Germany) and JSPS (Japan) and completed advanced research on quantum dot–silica nanoparticles at the University of Melbourne (Australia).

Dr. Selvan held leadership roles at A*STAR Singapore (2003–2016) as Principal Scientist at IBN and IMRE, and served as Adjunct Associate Professor at NUS, teaching advanced nanomaterials across academic levels. His subsequent appointments include Visiting Professor at Myongji University and KIST (Korea, 2017–2018), Senior Fellow at NTU LKC School of Medicine (2019–2020), and Chief Scientist at a biomedical startup (2021–2022).

Dr. Selvan has authored ~100 research publications and 2 books with a *citation index of over 8000 and an h-index of 43*. He is an inventor of 7 awarded patents (5 USA, 1 Europe, and 1 Korea). Dr. Selvan has been serving as an Editorial Board Member of Scientific Reports (Nature Publishing Group), and Nanomaterials (MDPI). Dr. Selvan has organized international conferences and delivered invited talks worldwide. His research spans multifunctional nanoparticles and nanocomposites for biomedical, energy, and environmental applications. He is also highly proficient in technical writing, including grant proposals and whitepapers in clean energy and biomedical domains.

Selected Publications:

1. N. Vijay, S. Jeevanandham, S. Ramasundaram, T.H. Oh*, S.T. Selvan*, Recent Advancements in Multimodal Chemically Powered Micro/Nanorobots for Environmental Sensing and Remediation, *Chemosensors* 2025,13, 69.
2. S.T. Selvan*, Nanomedicine: Emerging Prospects, Springer Briefs in Applied Sciences and Technology, *Nanotheranostics* 2023, 1–73.
3. K.B. Viswanath, K. Suganya, G. Krishnamoorthy, M. Marudhamuthu, S.T. Selvan*, V.S. Vasantha*, Enzyme-Free Multiplex Detection of Foodborne Pathogens Using Au Nanoparticles-Decorated Multiwalled Carbon Nanotubes, *ACS Food Science & Technology* 2021, 1, 1236-1246.
4. T. Boobalan, M. Sethupathi, N. Sengottuvelan, P. Kumar, P. Balaji, B. Gulyás, P. Padmanabhan, S.T. Selvan*, A. Arun*, Mushroom-Derived Carbon Dots for Toxic Metal Ion Detection and as Antibacterial and Anticancer Agents. *ACS Applied Nano Materials*, 2020, 3, 5910–5919.
5. S.T. Selvan*, R. Ravichandar, K.K. Ghosh, A. Mohan, P. Mahalakshmi, B. Gulyás, P. Padmanabhan, Coordination chemistry of ligands: Insights into the design of amyloid beta/tau-PET

imaging probes and nanoparticles-based therapies for Alzheimer's disease, *Coordination Chemistry Reviews*, 2020, 430, 213659.

6. S.T. Selvan*, P. Padmanabhan, B. Gulyás, Nanotechnology Based Diagnostics and Therapy for Pathogens- Related Infections in the CNS, *ACS Chemical Neuroscience* 2020, 11, 2371–2377 (Perspective, Special issue on CNS Pathogens).