

Tianlong Deng, Ph.D.

Professor of Chemistry and Chemical Engineering
Director of Key Laboratory of Marine Resource Chemistry and Food Technology,
Ministry of Education of China
Director of Tianjin Belt and Road International Joint Laboratory
Dean of College of Marine and Environmental Sciences
Tianjin University of Science and Technology
TEDA, 300457, Tianjin, China
Email: tldeng@tust.edu.cn
<https://mes.tust.edu.cn/Faculty/Professor/8fc9c8cf3a594b3e91ce5b73289c9aff.htm>



I. Education and Experience

Tianlong Deng has been a full professor since 2001. He received his B.S., M.S., and Ph.D. degrees from Chengdu University of Science and Technology (CDUT) in 1990, 1993, and 1999, respectively, and did his postdoctoral research at Laurentian University, Canada, in 2002. He is currently the Dean of the School of Marine and Environmental Sciences and the Director of the Key Laboratory of the Ministry of Education, Tianjin University of Science and Technology (TUST). He has been consecutively selected as one of the top 2% of the world's top scientists in Stanford University's 'Influential Scholars List' and 'Lifetime Scientific Influence Ranking', and is an expert enjoying special governmental subsidies from the State Council of China.

He obtained academic awards and honors as a Specially-appointed Professor of Tianjin Government in 2009, the Discipline Leading Talent of Tianjin Universities in 2012, A prestigious membership of "A Hundred Talents Plan" of the Chinese Academy of Sciences in 2005, and so on. His research interests are phase equilibria and phase diagrams of salt-water systems, comprehensive utilization of salt lake resources, and experimental geochemistry. He received financial support from the National Key Research and Development Program (2022YFE0125500), the State Key Program of the National Natural Science Foundation of China (NNSFC, grants U21A20299 and 20836009), the NNSFC (Grants 21773170, U1407113, 21276194, 40773045, 40573044, and 40103009), and so on. He was awarded the first prize in Tianjin Teaching Achievements, the first prize in Scientific and Technological Progress of China General Chamber of Commerce, the second prize in Tianjin Natural Science, and 12 other provincial and ministerial level scientific and technological awards as the first finisher.

He is a member of the Committee of the International Salt Lake Society, Deputy Director of the Salt Resources and Environment Committee of the Chinese Geological Society, a member of the Thermodynamics and Thermal Analysis Committee of the Chinese Chemical Society, and a member of the Lithium Salt Branch of the China Inorganic Salt Industry Association, etc. He is also an expert in evaluating the National Science and Technology Prize, an expert in assessing the National Foundation Committee, and an expert in the fourth and fifth rounds of the Chemical Engineering Discipline Evaluation.

Research Interests: Comprehensive utilization of salt lake brine, oil-field water, and geothermal water resources; Phase equilibrium and phase diagram; Thermodynamic and thermal analysis; Marine chemistry.

Supervisor: Postdoctoral Co-supervisor on Chemical Engineering and Technology, Doctoral supervisor on Chemical Engineering and Technology, Marine Science, and Biology and Medicines.

II. Guest Editor-in-Chief of special issues journals

1. Tianlong Deng, Pure and Applied Chemistry, Special issue for Celebrating IUPAC's 100th Anniversary International Album of Solution Chemistry (Celebrating IUPAC's 100th Anniversary International Album of Solution Chemistry), 2020; 92(10), 1537-1717.

2. Tianlong Deng, Mianping Zheng, Egor Zadereev, Katia Hueso, Lichun Ma, Journal of Oceanology and Limnology, Special issue on Salt Lake Research (Special issue of the International Journal of Salt Lake Research), 2023, 41(4), 1221-1628.

3. Aharon Oren, Tianlong Deng, Nikolai V. Shadrin, Mianping Zheng, Egor Zadereev, Journal of Oceanology and Limnology, Special issue on Salt Lake Research (Special issue of the International Journal of Salt Lake Research), 2018, 36(6), 1091-2084.

III. Five Representative Publications

1. Can Liu, Xinru Li, Qiming Duan, Xiaoping Yu*, Yafei Guo, Tianlong Deng*, Insight into strontium recovery from oilfield water by porous fiber-supported ammoniated titanium phosphate: Adsorption performance and mechanisms, **Chemical Engineering Journal**, 2025, 503, 158586.

2. Kaiyu Zhao, Jing Li, Jiyu Yuan, Xiaoping Yu*, Yafei Guo, Zhenzhen Jiang, Mingli Li, Ji Duo, Tianlong Deng*, A novel Co-doped H₂TiO₃ spinning composite for efficient lithium recovery from alkaline lithium precipitation mother liquor, **Chemical Engineering Journal**, 2024, 482, 148989.

3. Jinghui Li, Wenlei Fan, Wei Qin, Chi Ma, Linxue Yan, Yafei Guo*, Murodjon Samadiy, Umarbek Alimov, Tianlong Deng*, The regeneration process of FePO₄ in electrochemical lithium extraction: The role of alkali ions, **Chemical Engineering Journal**, 2024, 493, 152476.

4. Tianlong Deng, Huan Zhou, Xia Chen. **Salt-water System Phase Diagram and Application**, Beijing: Chinese Chemical Industry Press, 2020, pp.326.

5. Tianlong Deng, Shiqiang Wang and Yafei Guo, **Metastable phase equilibria and phase diagrams of Salt Lake Brine Systems in the Qaidam Basin**, Beijing: Science Press, 2017, pp300.

IV. Candidate Statement

I participated in the 6th ISSLR in 1994 when I was a “young boy.” Since 1994, I have been working in chemistry and chemical engineering on phase equilibria of salt lake brine systems and the comprehensive utilization of salt lake resources. My journal editor experience is as follows: I was the sole guest editor of the special issue published in Pure and Applied Chemistry (2019, volume 92, issue 6). In addition, special issues were published in the Journal of Oceanology and Limnology (2023, volume 41; 2018, Volume 36, Issue 6). A special issue was published in the Journal of Salt Science and Chemical Industry (2017, volume 46, issue 6) as a sole guest editor.

I am ready to serve our ISSLR members in the future. I will strengthen the interaction with members of our ISSLR society and look forward to accelerating the development of ISSLR around the world.