



The Nature of Water

MARCH 6TH & 7TH, 2023
MLK JR. BUILDING, WEST PAULEY BALLROOM, 2ND FLOOR
2495 BANCROFT WAY, BERKELEY, CA 94720

PROFESSOR BENGT NORDÉN

*Physical Chemist
Royal Swedish Academy of Sciences*



BIOGRAPHY

Professor Nordén is a physical chemist with interest in structure and interactions in biomolecular solution systems. His pioneering contributions cover a range of physics and chemistry: from fundamental optical properties of bio-chromophores to topics related to molecular recognition. Using polarized light spectroscopy he developed a method for assessing three-dimensional structures of protein-DNA complexes in solution. Nordén designed several, now famous constructs, including peptide nucleic acids (PNA) and threading-intercalators, some with unique kinetic (in contrast to thermodynamic) recognition properties and a modular system for assembly of addressable supra-molecular networks for nanotechnological applications. He recently discovered an extended conformation of DNA with implications to genetic recombination mechanisms and possibly also to the genetic code.

Prof Nordén is a former Chair of the Nobel Prize Committee for Chemistry. Based on his international networks he founded the Molecular Frontiers Foundation (MFF) hosted by the Royal Swedish Academy of Sciences. MFF has as purposes to identify early on scientific breakthroughs and to empower youth in demonstrating the usefulness of science.

TALK TITLE

**The Role
of Water
for Life**

QUOTE

"I am optimistic about our possibilities to mitigate the challenges that currently trouble planet Earth. Already we know how to utilize energy to produce electricity and how to produce hydrogen electrolysis of water, as well as how to combine hydrogen gas by dioxide to make fuels that can be used for aviation propulsion. Eventually fuel cells, that combine hydrogen with oxygen from the air, and produce only water as exhaust will be used to run cars, this, once convenient ways for storing and distributing hydrogen are developed."

Professor Bengt Nordén

SPECIAL THANKS TO



MOLECULAR FRONTIERS



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