

Previous Ferenc Török Memorial Lectures presented at the Institute of Chemistry, Eötvös University, Budapest, Hungary

2000	Péter Pulay
2001	Jonathan Tennyson
2002	Tucker Carrington Jr.
2003	Petr Čarský
2004	Brian T. Sutcliffe
2005	Jean Demaison
2007	Josef Michl
2008	Peter R. Schreiner
2009	Vladimir Tyuterev
2010	Markku Räsänen
2011	Wesley D. Allen



12TH ANNUAL FERENC TÖRÖK MEMORIAL LECTURE

Thursday, May 21, 2015

3:00 pm, auditorium 062, Institute of Chemistry
Eötvös University, Budapest, Pázmány sétány 1/A

Bill Poirier

**“Large Scale Exact Quantum Dynamics Computations:
One Hundred Thousand Quantum States of Benzene”**

Presented by the
MTA-ELTE Complex Chemical Systems Research Group
Eötvös University, Budapest

FERENC TÖRÖK (1929 – 1981)

Ferenc Török was born in Pécs, Hungary in 1929. He started his university studies in 1947 in the Department of Chemistry of the Eötvös University and received his M. S. degree in 1952. In the same year he became the co-worker of Professor Béla Lengyel at the Department of General and Inorganic Chemistry of the same institute. Ferenc Török received his first higher degree in chemistry (Candidate of Chemical Sciences) in 1960. He was member of the Inorganic Chemistry Research Group of the Hungarian Academy of Sciences from 1962, and later became the leader of its theoretical chemistry division. He received another M.S. degree in 1967, this time in applied mathematics. He received his second higher degree in chemistry (Doctor of Chemical Sciences) in 1970 and became professor of chemistry at the Department of General and Inorganic Chemistry of Eötvös University in 1971.

Ferenc Török made important contributions to several fields of chemistry: organosilicon chemistry, vibrational (infrared and Raman) spectroscopy, polymer sciences, and, most importantly, molecular quantum chemistry.

Ferenc Török was a generous, mild-mannered person whose profound ideas and suggestions became cornerstones for several scientific inquiries. Many of his students owe much of their professional careers to his guidance. Perhaps the most unique achievement of Professor Török was the creation of a Hungarian school of modern structural chemistry, with a special blend of quantum chemistry and spectroscopy, a truly revolutionary idea in the early 1960's.

Beside research, Professor Török laid great emphasis on teaching, as well. He contributed significantly to the reform of high-school chemistry teaching in Hungary. He co-authored, with Professor Ede Kapuy, a book entitled *Electronic Structure of Atoms and Molecules*, still perhaps the best Hungarian textbook on quantum chemistry.

The establishment of the Török lecture series in quantum chemistry at his home institution recognizes the contributions and legacy of this remarkable scientist.

LIONEL WILLIAM (BILL) POIRIER

EDUCATION:

University of California Berkeley— Ph.D. in Theoretical Chemical Physics Fall 1997
Research Advisor: Professor William H. Miller (Chemistry)
Advisor of Record: Professor Robert G. Littlejohn (Physics)
Dissertation Topic: *Optimal Separable Bases and Molecular Collisions*
University of Maryland College Park— Advanced Special Student in Physics
Research Advisor: Professor Douglas G. Currie (Physics/Astronomy)
Research Project: Chaotic Model of the Solar “Attractor”
Dates of Attendance: (graduate physics classes) September 1989 to May 1990
Brown University— Sc.B. in Physics with Honors, *magna cum laude* May 1988
Research Advisor: Professor James C. Baird (Physics/Chemistry)
Thesis Topic: *Fractal Dimension: A New Information-Theoretic Derivation*
A.B. in Mathematics (fulfilled course requirements)

EMPLOYMENT HISTORY:

Professor— Department of Chemistry and Biochemistry, Texas Tech University
(Graduate Faculty Member, Joint Professor of Physics) from September 2009
Graduate Program Director – Department of Chemistry and Biochemistry, TTU
from September 2007
Associate Professor – (TTU, see above) September 2006 to August 2009
Assistant Professor – (TTU, see above) August 2001 to August 2006
Research Associate – Professor Tucker Carrington, Jr. (advisor), Université de Montréal
High resolution molecular spectroscopy (computational) August 2000 to July 2001
Research Associate – Professor John C. Light (advisor), University of Chicago
Molecular spectroscopy; quasiclassical phase space model. Oct. 1997 to Aug. 2000
Graduate Student Researcher— Professor William H. Miller (advisor), UC Berkeley
Quantum reaction dynamics (computational) January 1994 to September 1997

AWARDS AND HONORS:

Sigma Xi, Phi Beta Kappa
Councilor, American Chemical Society
2015: Visiting Professor, Dresden, Germany (Max Planck Institute)
2013: Plenary Lecturer, Austrian Academy of Sciences
2013: Texas Tech System Barnie E. Rushing, Jr. Faculty Distinguished Research Award
2011: Professeur Invité, Montpellier France (Centre national de la recherche scientifique)
2008: Texas Tech System Chancellor’s Council Distinguished Research Award
2005, 2007: TTU Graduating Senior Named Outstanding Faculty Award
2005: TTU College of Arts and Sciences Tribute to Teachers Award
2002: U.S. Department of Energy Early Career Award