

PROMOTION RECOMMENDATION  
The University of Michigan  
College of Literature, Science, and the Arts

Eitan Geva, assistant professor of chemistry, College of Literature, Science, and the Arts, is recommended for promotion to associate professor of chemistry, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

1995	Ph.D.	Hebrew University
1989	B.Sc.	Hebrew University

Professional Record:

2000 – present	Assistant Professor, Department of Chemistry, University of Michigan
2000	Postdoctoral Research Fellow, Chemistry Department, University of Utah
1998 – 1999	Postdoctoral Research Fellow, Weizmann Institute of Science, Rehovot, Israel
1995-1998	Postdoctoral Research Fellow, Chemistry Department, University of Wisconsin, Madison

Summary of Evaluations:

Teaching – Professor Geva is an excellent teacher and research mentor to undergraduate and graduate students. He has received excellent teaching evaluations in the physical chemistry curriculum; in a large, lower division undergraduate course; and in a graduate-level quantum chemistry class. He has also contributed to the Department's education mission by serving as a mentor to students from high school to postdoctoral research, and from programs as diverse as chemistry, physics and applied mathematics.

Research – Professor Geva has garnered respect as one of the leading theorists in the country. His research area is computational chemistry and it is one of the foundations of physical chemistry. He has made a number of major conceptual and methodological breakthroughs that enable the dynamical simulation of important chemical processes, especially those occurring in liquids. He has been very productive with nineteen papers in the top journals in the field. He has been invited to present his work at many national and international meetings, and at many universities around the country.

Recent and Significant Publications:

- “Vibrational energy relaxation rates via the linearized semiclassical approximation: Applications to neat diatomic liquids and atomic-diatom liquid mixtures”, with B. J. Ka and Q. Shi, *Journal of Physical Chemistry A*, 109, 2005, p. 5527.
- “A comparison between different semiclassical approximations for optical response functions in nonpolar liquid solutions”, with Q. Shi, *Journal of Chemical Physics*, 122, 2005, p. 064506.
- “Nonradiative electronic relaxation rate constants from approximations based on linearizing the path-integral forward-backward reaction”, with Q. Shi, *Journal of Physical Chemistry A*, 108, 2004, pp. 6109-6116.

“A new approach to calculating the memory kernel of the generalized quantum master equation for an arbitrary system-bath coupling”, with Q. Shi, *Journal of Chemical Physics*, 119, 2003, pp. 12063-12076.

Service – Professor Geva has served on, and continues to serve on a number of important departmental and university committees. His contribution has been particularly noteworthy in his work on the Graduate Admissions Committee where he has worked to increase the graduate cohort size and quality. As a member of numerous physical chemistry search committees, he has been an important contributor to our recent success in recruiting outstanding faculty in this area. Through this effort, Professor Geva has played a key role in revitalizing theoretical physical chemistry.

External Reviews:

Reviewer (A)

“Eitan is a creative, accomplished and productive theoretical chemist [of his generation] whose research to date has focused primarily on quantum dynamics of condensed phase systems. He has generated a solid body of excellent work in this area, including almost 20 peer-reviewed papers in first rate journals...”

Reviewer (B)

“His work is very visible, well cited, and extremely highly regarded in our field.”

Reviewer (C)

“...I have been impressed with Dr. Geva’s intelligence, integrity, and dedication to science.”

Reviewer (D)

“The scientific contributions of professor Eitan Geva represent significant achievements. ... He is a good teacher and instructor to graduate students establishing a vibrant research group.”

Reviewer (E)

“...Eitan’s record while at Michigan is truly outstanding. I count over 20 peer-reviewed publications. ... I should add that Eitan is a very careful scientist who values quality more than publication volume. Eitan is visible on the national and international front, as evidenced by his invited lecture/seminar record.”

Reviewer (F)

“I find him exceptionally quick and bright, picking up on any thread instantly and seeing the issues. This same clear and penetrating analysis is clear in his papers, where he immediately gets to the core without any ‘fluff’ and posturing.”

Reviewer (G)

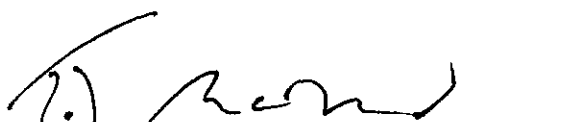
“Eitan works on hard problems and important problems. He is involved in one of the most fundamental areas of chemical physics... It is clear from reading his work, and from talking to him that he is technically very sophisticated...”

Reviewer (H)

“Perhaps the most exciting aspect of Eitan’s work is that he has demonstrated his clear understanding of the structure of theory as it applies to condensed phase dynamics, as well as his ability to develop new theories that are more powerful than the existing ones. In addition, he is talented in making real-world applications, thereby showing the power of the methods that he has developed.”

Summary of Recommendation:

Professor Geva is working at the forefront of computational chemistry. He is an excellent teacher and is becoming a leader in the physical chemistry cluster in his Department. He is also a collegial, dependable member of the Department who willingly contributes to a variety of service functions. The Executive Committee of the College of Literature, Science and the Arts and I recommend that Assistant Professor Eitan Geva be promoted to the rank of associate professor of chemistry, with tenure.



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Terrence J. McDonald, Dean  
College of Literature, Science, and the Arts

May 2006