

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

Kevin J. Kubarych, 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:

Ph.D.	2003	University of Toronto
B.S.	1996	Brown University

Professional Record:

2005 – present	Assistant Professor, Department of Chemistry, University of Michigan
2003 – 2005	Post-doctoral Research Fellow, Ecole Polytechnique

Summary of Evaluations:

Teaching – Professor Kubarych is an excellent teacher and mentor whose work was recently recognized with the Camille Dreyfus Teacher-Scholar Award. He was instrumental in developing the curriculum in an upper level undergraduate laboratory course where he collaborated with undergraduates to develop a femtosecond spectrometer as part of his CAREER grant. He also contributed significantly to the education mission of the department by serving on multiple graduate student thesis committees and as a dedicated research mentor to a large cohort of undergraduate and graduate students. His graduate students have been particularly successful at obtaining departmental and Rackham awards under his mentorship.

Research – Professor Kubarych's field of research is physical chemistry with a specialization in spectroscopy. He is developing and employing a novel tool to probe the dynamics of chemical systems. This technology simplifies, speeds, and reduces the cost of performing experiments. He has garnered national respect and praise as a physical chemist. Professor Kubarych has been very productive at publishing (20 publications from Michigan and 34 publications overall) and presenting his work at conferences. His research has been funded by external grants from the American Chemical Society Petroleum Research Fund, Dreyfus Foundation, and the National Science Foundation (CAREER and FOCUS).

Recent and Significant Publications:

- “Ultrafast vibrational stark-effect spectroscopy: Exploring charge-transfer reactions by directly monitoring the solvation shell response,” with C. R. Baiz, *Journal of the American Chemical Society*, 132, 2010, pp. 12784-12785.
- “Watching solvent friction impede ultrafast barrier crossings: A direct test of Kramers theory,” with J. M. Anna, *Journal of Chemical Physics*, 133, 2010, p. 174506.
- “Multidimensional electronic and vibrational spectroscopy: An ultrafast probe of molecular relaxation and reaction dynamics,” with J. P. Ogilvie, in Advances in Atomic, Molecular, and Optical Physics, Volume 57, P. Berman (ed.), Academic Press, 2009, pp. 249-321.

“Dissecting enthalpic and entropic barriers to ultrafast equilibrium isomerization of a flexible molecule using 2DIR chemical exchange spectroscopy,” with J. M. Anna and M. R. Ross, *Journal of Physical Chemistry A*, 113, 2009, pp. 6544-6547.

Service – Professor Kubarych has made notable contributions to the department by serving on a variety of committees, including the Recruiting Committee where he spearheaded the redesign of the departmental website. Additionally, he has made significant contributions to the University, serving on committees at the Rackham Graduate School and as co-organizer of the FOCUS seminar program.

External Reviews:

Reviewer (A)

“There is a lot to like in the Kubarych portfolio. ... One cannot help but be impressed by Kubarych’s experimental expertise, high level of productivity, and comfort with theoretical modeling. ... I think Kubarych would get tenure almost anywhere.”

Reviewer (B)

“I am extremely impressed with Prof. Kubarych’s level of productivity, as well as with the consistent high quality of the work he has produced. ... He has published in some of the best journals in the field, and his trajectory is headed strongly upward. ... Prof. Kubarych is clearly one of the very top physical chemists in the country at his career stage, as well as one of the best scientists working on 2-D IR spectroscopy.”

Reviewer (C)

“Kevin has been very productive with a slew of publications in top journals... He would be a worthy candidate for tenure at [my institution], as he has established himself in the field, has high visibility, and great promise of impact and continued productivity.”

Reviewer (D)

“...I am extremely impressed...and see in him a future leader in the field of chemistry. ... His combination of asking advanced questions in dynamics and developing the technology needed to answer them is truly a[n] outstanding approach that is being successfully applied in a wide range of problems.”

Reviewer (E)

“...Kevin Kubarych [has] succeeded in establishing his group as one of the world leading teams in two-dimensional infrared spectroscopy...the applications to chemistry that he demonstrated are among the best ever produced in this field. ...he is a brilliant scientist.”

Reviewer (F)

“Once he arrived at Michigan, Kevin launched a very ambitious research program that has pioneered new methods to study chemical reactions that is truly his own. ...Kevin has already established himself as one of the top researchers in his field.”

Reviewer (G)

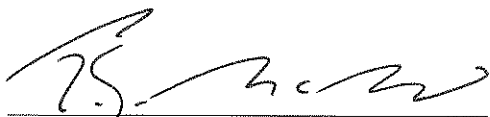
“Kubarych is a rising star... Kubarych is bold and...[is not afraid] to attack complex systems with novel tools. He is a highly creative and enthusiastic scientist [of his generation] with a unique sense for choosing relevant and important problems, and with a proven technical ability to carry out challenging and meaningful experiments. ... You have a winner.”

Reviewer (H)

“He has accumulated a considerable amount of funding through external peer-reviewed grants, in a period when obtaining such funding has been extremely competitive, and he is seeking to broaden his funding base through NIH. ...his record of publication is excellent. The productivity is high...the quality has met a high international standard.”

Summary of Recommendation:

Professor Kubarych is recognized as one of the leaders in his field. He is a caring teacher and mentor, and has a strong service record. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Assistant Professor Kevin J. Kubarych be promoted to the rank of associate professor of chemistry, with tenure, in the College of Literature, Science, and the Arts.



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Terrence J. McDonald  
Arthur F. Thurnau Professor,  
Professor of History and Dean,  
College of Literature, Science, and the Arts

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