Approved by the Regents
May 16, 2013

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

Kristina I. Håkansson, associate professor of chemistry, with tenure, College of Literature, Science, and the Arts, is recommended for promotion to professor of chemistry, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D.	2000	Uppsala University
M.Sc.	1996	Uppsala University

Professional Record:

2009 – present	Associate Professor, Department of Chemistry, University of Michigan
2010	Visiting Professor, Life Sciences Institute, University of Michigan
2005 – 2008	Dow Corning Assistant Professorship, University of Michigan
2003 – 2009	Assistant Professor, Department of Chemistry, University of Michigan
2000 – 2003	Post-doctoral Fellow, National High Magnetic Field Laboratory, Florida State University

Summary of Evaluation:
Teaching – Professor Håkansson has an excellent teaching record. She has taught at all levels of the curriculum and developed an important new course in mass spectrometry that attracts students from a wide range of departments and programs. Student evaluations confirm that her teaching style is successful in the classroom. Professor Håkansson is also a very successful mentor. She has served on multiple graduate student thesis (67) and preliminary committees, and as an advisor to the undergraduate chemistry concentrators. She has also been an outstanding research mentor of post-graduate (six post-doctoral fellows), graduate (four M.S. and 16 Ph.D. students) and undergraduate (16) students.

Research – Professor Håkansson is an innovative researcher with an excellent record of independent and collaborative work. She has gained national and international recognition in the development and application of mass spectrometry, a subfield of analytical chemistry, and she is viewed as a leader in her field. Since her last promotion, Professor Håkansson has published 22 research papers in high-quality, high-impact journals and her work is highly cited. She has been successful at obtaining funding with current grants from the National Science Foundation and the National Institutes of Health, and she has presented her work at numerous conferences and university seminar series.

Recent and Significant Publications:
"Characterization of *O*-sulfopeptides by negative ion mode tandem mass spectrometry: Superior performance of negative-ion electron capture dissociation," with K.E. Hersberger, *Analytical Chemistry*, 84, 2012, pp. 6370-6377 (accelerated article).
"Negative ion electron capture dissociation: Radical-driven fragmentation of charge-increased gaseous peptide anions," with H. J. Yoo, et al., *Journal of the American Chemical Society*, 133, 2011, pp. 16790–16793.

"Meta-omic characterization of the marine invertebrate microbial consortium that produces the chemotherapeutic natural product ET-743," with C. M. Rath, et al., *American Chemical Society Chemical Biology*, 6, 2011, pp. 1244-1256.

"Metamorphic enzyme assembly in polyketide diversification," with L. Gu, et al., *Nature*, 459, 2009, pp. 731-735.

Service – Professor Håkansson has performed outstanding service on numerous departmental and professional committees. She is also on the editorial board of a major journal in her field and has served on the advisory panel for another. She continues to be very active in reviewing manuscripts for many important professional journals and funding agencies.

External Reviewers:

Reviewer (A)

"Probably the most exciting of her recent work was the discovery of a surprising new mechanism for ion activation, negative-ion electron capture dissociation, niECD. … I believe that this is truly ground-breaking research, and will have tremendous applicability for a variety of thorny problems in structure analysis… …Kicki has established herself as an internationally recognized authority in biological mass spectrometry."

Reviewer (B)

"I am enthusiastic about Dr. Hakansson's accomplishments, her commendable record of productivity as an associate professor, her excellent mentorship of students and her service to the greater scientific community. … Her collective body of work over the past four years demonstrates solid evidence of sustained scholarship and establishment of a cohesive focus…"

Reviewer (C)

"…I think it is very clear that Prof. Hakansson has established an internationally recognized research program in mass spectrometry. She is one of the leaders in the area of ion-electron interactions and has performed pioneering work in this field."

Reviewer (D)

"Four of her postdoctoral students have positions in biosciences…academics (ass't researcher), and a medical institute. This is a great record of placement in strong positions, indicating that Kicki's efforts as a mentor are respected by potential employers. … Her work is highly competent and technically expert, the results trustworthy, and the interpretations cautious, careful, and complete. She provides appropriate perspective and is generous in citing precedents to her ideas."

Reviewer (E)

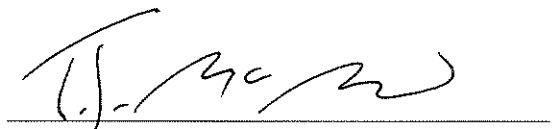
"Perhaps what best distinguishes Hakansson from most others in her field is that she understands and elucidates the mechanisms underlying various gas-phase ion activation and dissociation processes. … Kristina is a fine teacher. … She gives well-organized oral presentations, supported by creative original graphics, and defends her views politely but definitively. … Kristina is rapidly building an international reputation as an expert in biological mass spectrometry."

Reviewer (F)
"A particularly noteworthy line of work is Dr. Hakansson's discovery of negative ion electron capture. … I regard her performance with this line of work to be exceptional. Only an insightful, creative, and mature scientist could have performed the level of scholarship that she exhibited. … She is making excellent progress in her research program and her profile in the community continues to grow. She has a very strong case."

Reviewer (G)
"Kicki has been a fantastic collaborator, and through her insights, expertise, broad interests and leadership has played a major role in pushing studies of natural product biosynthesis to new areas. … Kicki is clearly operating as a leader in the field of mass spectrometry research at the national and international level. She is invited to present at major symposia across the globe and her scholarship and contributions are widely cited."

Reviewer (H)
"…Hakansson has shown outstanding abilities and tremendous persistence. She has almost single-handedly developed an area of research related to interaction of…[low]-energy electrons with various nonpeptide types of gas-phase biological ions… …Hakansson has become one of the prominent members of the large mass spectrometry community."

Summary of Recommendation:
Professor Håkansson is an innovative researcher and an excellent teacher who has made significant contributions to her department and to her profession. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Associate Professor Kristina I. Håkansson be promoted to the rank of professor of chemistry, with tenure, College of Literature, Science, and the Arts.



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

May 2013