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

Anne J. McNeil, assistant professor of chemistry, College of Literature, Science, and the Arts, and assistant professor of macromolecular science and engineering, College of Engineering, is recommended for promotion to associate professor of chemistry, with tenure, College of Literature, Science, and the Arts, and associate professor of macromolecular science and engineering, without tenure, College of Engineering.

Academic Degrees:

Ph.D. 2005 Cornell University

B.S. 1999 College of William and Mary

Professional Record:

2007 – present Assistant Professor, Department of Chemistry and Macromolecular

Science and Engineering Program, University of Michigan

2005 – 2007 L'Oreal Post-doctoral Fellow, Massachusetts Institute of Technology

Summary of Evaluation:

Teaching – Professor McNeil is dedicated teacher and research mentor to students at all levels. She has made considerable contributions to curricular development in her courses, including pioneering a novel educational approach of having students prepare and post critical research reviews on Wikipedia. Student evaluations range from excellent to outstanding. Professor McNeil has served on multiple graduate student thesis and preliminary committees and is a dedicated research mentor to a large cohort of undergraduate and graduate students. In recognition of her research and teaching accomplishments Professor McNeil was awarded the departmental Seyhan N. Ege Junior Faculty Award (2009), the LSA Excellence in Education Award (2011), and the Camille and Henry Dreyfus Teacher-Scholar Award (2012).

Research – Professor McNeil has gained national and international recognition as an expert in the field of organic materials chemistry. Her research program focuses on the development of novel organic materials with potential applications in sensing, regenerative medicine, environmental remediation and solar cells. Professor McNeil has established a well-funded research group with committed funding from the National Science Foundation and the Department of Energy. She has also garnered a large number of competitive and prestigious awards, including an Alfred P. Sloan Research Fellowship (2011), Presidential Early Career Award in Science and Engineering (2010), and the Young Investigator Award (2009), among others. She has been productive at publishing and presenting her work at conferences.

Recent and Significant Publications:

"Impact of copolymer sequence on solid-state properties for random, gradient, and block copolymers containing Thiophene and Selenophene," with E. F. Palermo, *Macromolecules*, 45, 2012, pp. 5948–5955.

"Evidence for ligand-dependent mechanistic changes in Ni-catalyzed chain-growth polymerizations," with E. L. Lanni, *Macromolecules*, 43, 2010, pp. 8039–8044.

- "Mechanistic studies on Ni(dppe)Cl₂ -catalyzed chain-growth polymerizations: Evidence for rate-determining reductive elimination," with E. L. Lanni, *Journal of the American Chemical Society*, 131, 2009, pp. 16573–16579.
- "Analyte-triggered gelation: Initiating self-assembly via oxidation-induced planarization," with J. Chen, *Journal of the American Chemical Society*, 130, 2008, pp. 16496–16497.

<u>Service</u> – Professor McNeil has made substantial service contributions to her department, college, university, and community. She performs well above the level expected of an assistant professor.

External Reviewers:

Reviewer (A)

"There should be no doubt that her trajectory is steep.....one of the most impressive aspects of Dr. McNeil's independent career is the program to improve science education by the editing of Wikipedia. ... She has hit and surpassed each and [e]very hurtle that a first rate research and teaching university should expect..."

Reviewer (B)

"Ann[e] has established a truly outstanding research program at Michigan. I am most familiar with her work on the synthesis of conjugated polymers where she has made major, high impact contributions. ... McNeill's record of publications, external recognition and grant support is truly astonishing. ...you have a rising star in Anne McNeill."

Reviewer (C)

"Anne is emerging as the best-of-breed. ...the University of Michigan has every reason to be wildly optimistic about Anne's future. I would promote her enthusiastically..."

Reviewer (D)

"Anne's potential is tremendous and she is doing some of the best work in polymer synthesis that I have seen for many years. ... In terms of Educational activities, Anne's creativity again allows her to stand out from all of the traditional and 'me-too' approaches that are prevalent today. Her 'Wikipedia' project is simply outstanding. It is engaging for the students involved and has significant impact beyond. ... On comparison with peers, she is clearly in a class by herself..."

Reviewer (E)

"I believe that she is a first-rate scientist, scholar and educator and that you should promote her without question. ... She brings rigorous and sophisticated mechanistic skills, a strong background in organic, organometallic and polymer chemistry, and the ability to understand the implications of mechanistic results and exploit them in reaction design. Anne can think outside the box, has a fertile imagination, and is determined to work on interesting multidimensional problems. Her intellectual achievements are impressive and her work is having an impact in several fields."

Reviewer (F)

"...this is one of the strongest promotion and tenure cases I have reviewed. ... Prof McNeil has been active and very successful in obtaining research funding. As a single PI she has obtained a number of grants (totaling ca. \$3 million) from a wide diversity of sources. This is extraordinary given the relatively lean funding environment that has been in place over the last few years."

Reviewer (G)

"Anne is clearly energetic, imaginative, and ambitious. Based on her research so far one can predict that she will continue to do creative work in materials chemistry and will continue to grow as a scientist. Most importantly, she has demonstrated an ability to cross fields and innovate in interdisciplinary research at the interface of materials science and chemistry."

Reviewer (H)

"She has made a name for herself and is widely respected internationally in both the polymer and organic chemistry communities. She has established a rigorous and high impact program and it should be no surprise that she has been able to attract substantial resources. ... "

Summary of Recommendation:

Professor McNeil is an innovative researcher and dedicated scholar. She is also an excellent teacher and an outstanding citizen. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Assistant Professor Anne J. McNeil be promoted to the rank of associate professor of chemistry, with tenure, College of Literature, Science, and the Arts, and associate professor of macromolecular science and engineering, without tenure, College of Engineering.

Terrenge J. McDonald

Arthur F. Thurnau Professor,

Professor of History and Dean

College of Literature, Science, and the Arts

David C. Munson, Jr.

Robert J. Vlasic Dean of Engineering

College of Engineering

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