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

Ingrid L. Hendy, associate professor of Earth and environmental sciences, with tenure, College of Literature, Science, and the Arts, is recommended for promotion to professor of Earth and environmental sciences, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:		
Ph.D.	2000	University of California, Santa Barbara
M.Sc.	1995	University of Waikato, New Zealand
B.Sc.	1992	University of Waikato, New Zealand
Professional Record:		
2010 – present		Associate Professor, Department of Earth and Environmental Sciences,
		University of Michigan
2002 - 2010		Assistant Professor, Department of Geological Sciences, University of
		Michigan
2000 - 2002		Post-doctoral Fellow, Department of Earth and Ocean Sciences,
		University of British Columbia

Summary of Evaluation:

<u>Teaching</u> – Professor Hendy is an effective and committed instructor who has contributed significantly to the educational mission of the Department of Earth and Environmental Sciences. She teaches a variety of undergraduate courses that reflect her expertise in oceanography, marine sciences, and climate change. She conceived and created "Inexhaustible Seas?" which is an upper-level course that focuses on environmental and sustainability issues related to the oceans that has a major focus on teaching students how to develop strong writing skills. One of her students won the 2014 Association of Environmental and Engineering Geologists student paper competition based on his term paper for this course. Another of her students won the 2015 LSA Sweetland Center for Writing upper-level writing prize in natural science. Other significant contributions to teaching include Professor Hendy's effort to revitalize and update the laboratory exercises for the introductory course in oceanography to include inquiry-based learning that involves hands-on activities, new technologies and laboratory equipment, and online student reflection on learning.

<u>Research</u> – Professor Hendy is a paleoceanographer whose research focuses on reconstructing past oceanographic conditions and past episodes of climate and environmental change, primarily through records contained in oceanic sedimentary deposits. She is especially well known for producing high-quality, high-resolution records using a large and varied set of proxies to address questions of first-order importance to society. Professor Hendy has developed a productive and broad research program, publishing 44 papers on topics that include millennial-scale climate variability, hydroclimate variability, Cordilleran ice sheet dynamics, and ocean anoxia. She has also been successful in raising external funds to support her research program, including awards from the National Science Foundation and the American Chemical Society.

Recent and Significant Publications:

- "Eastern tropical Pacific vegetation response to rapid climate change and sea level rise: A new pollen record from the Gulf of Tehuantepec, southern Mexico," with T. Minkley and C. Whitlock, *Quaternary Science Reviews*, 145(1), 2016, pp. 152-160, 10.1016/j.quascirev. 2016.05.039.
- "Isotopic and trace metal evidence for the regional expression of 'OAE 3' in the Western Interior Seaway," with A. Tessin, et al., *Paleoceanography*, 30(6), 2015, pp. 702-717, doi:10.1002/2014PA002729.
- "From extreme rainfall to drought: 250 years of annual resolved sediment deposition in Santa Barbara Basin, California," with T. J. Napier and A. Schimmelmann, *Quaternary International*, 387, 2015, pp. 3-12, doi:<u>10.1016/j.quaint.2015.01.026</u>.
- "Deglacial ocean warming and marine margin retreat of the Cordilleran Ice Sheet in the North Pacific Ocean," with M. A. Taylor and D. K. Pak, *Earth and Planetary Science Letters*, 403(0), 2014, pp. 89-98, doi:(<u>10.1016/j.epsl.2014.06.026</u>).

<u>Service</u> - Professor Hendy has contributed valuable service to her department on various faculty search committees and as organizer of the Smith Lecture Series. At the college level, she is currently serving as an elected member of the LSA Curriculum Committee and has taken part in the LSA Large Course Initiative Program, while also serving on the Rackham Graduate School Merit Award Committee. In addition, Professor Hendy has served in her professional community in a variety of ways, including as a panelist multiple times for the National Science Foundation, as a member of the editorial board of *Geology*, and as an editor of *Quaternary Science Reviews*.

External Reviewers:

Reviewer (A)

"...she has distinguished herself with a robust research program that has made significant contributions to paleoceanography and has developed an impressive educational record... Her teaching efforts and mentoring of both undergraduate and graduate students are exemplary by any standard."

Reviewer (B)

"...there is no doubt that Dr. Hendy is an excellent, well published geochemist and paleoceanographer... She pursues her scientific goals at a highly competent technical, analytical and conceptual level and applies these to an interesting and complementary set of problems, each being linked with a healthy spread of collaborators."

Reviewer (C):

"I was consistently impressed by the clarity of the writing of the papers authored either by Prof. Hendy or her students. Assumptions and caveats are clearly identified, and the literature reviews are thorough and up to date. Inferences drawn from her own work are clearly compared and contrasted to other views put out in the literature. This certainly reflects well on the scholarly approach Prof. Hendy takes."

Reviewer (D)

"I could say that Ingrid Hendy is a rising star in paleoceanography, but the truth is that she already is a star. I immediately know if one of Hendy's papers appears, I need to read it fast because it will change the way I think about things. I'm very pleased to support her promotion to Full Professor..."

Reviewer (E)

"...[Professor] Hendy is on par with the strongest candidates I've been asked to evaluate. She...has followed that up with a strong and steady stream of scholarly output that indicates solid personal growth and diversification of research interests. She is active and visible in the community and has successfully raised support for her research at a time of very tight federal funding."

Reviewer (F)

"...she has a superb cross-disciplinary earth system approach to her work. ...the body of work she has produced is arguably the most insightful work linking the biogeochemical and physical aspects of the western margin over the last glacial cycle. ... Both the quality and quantity of her publications has steadily increased since her last promotion, and she has solidified her reputation as one of the world's leading experts on high resolution paleoceanography..."

Reviewer (G):

"She has successfully published with almost all of her graduate students as first author which implies she has done a great job of mentoring. ...Ingrid has sniffed out some truly important questions regarding anthropogenic timescale changes in water availability and hydroclimate in California, and deoxygenation in the Pacific...she is poised with all of the tools and knowledge of the right sorts of cores at her ready to probe our understanding of these urgent phenomena in our perturbed modern world."

Summary of Recommendation:

Professor Hendy is widely recognized as a leader in the field of quaternary paleoceanography; she has a reputation for the exceptional quality of her work. She is also a dedicated instructor and mentor, and a valued colleague. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Associate Professor Ingrid L. Hendy be promoted to the rank of professor of Earth and environmental sciences, with tenure, College of Literature, Science, and the Arts.

Andrew D. Martin, Dean Professor of Political Science and Statistics College of Literature, Science, and the Arts

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