

PROMOTION RECOMMENDATION
University of Michigan-Flint
College of Arts and Sciences
Department of Chemistry and Biochemistry

Approved by the Regents
May 20, 2010

Jie Song, assistant professor of chemistry, Department of Chemistry and Biochemistry, College of Arts and Sciences, is recommended for promotion to associate professor of chemistry, with tenure, Department of Chemistry and Biochemistry, College of Arts and Sciences.

Academic Degrees:

Ph.D.	2002	University of North Dakota
M.S.	1996	Chinese Academy of Forestry, Beijing, P.R. China
B.S.	1993	Nanjing Forestry University, Nanjing, P.R. China

Professional Record:

2004 – Present	Assistant Professor of Chemistry, University of Michigan-Flint
2002 – 2004	Postdoctoral Associate, Ames Laboratory, U.S. Department of Energy
1997 – 2001	Graduate Research Assistant, University of North Dakota

Summary of Evaluation:

Teaching – Professor Jie Song has a well-conceived philosophy of teaching, and over six years has earned accolades from students and colleagues alike for his sensitive and committed work in the classroom, laboratory and as an advisor. He has an outstanding record of involving undergraduate students in research projects, has engaged in important curriculum development of a Masters program in his home department, and is actively engaged in academic assessment.

Research – With thirty publications since 1995 and twelve articles either published, accepted, or in circulation since his arrival at UM-Flint in 2004, Professor Song has consistently produced scholarship that is highly regarded by his department and peers in his field. Promise of future productivity is strong.

Recent and Significant Publications:

Song, J., Wang, Z., Jiang, Z., Chen, J., Han, Z., Zheng, W., Song, Z., Shang, S. “Studies on Synthesis and Quantitative Structure-Activity Relationship of Ant Repellent Derived from Turpentine Oil,” *Chemistry and Industry of Forest Products*, 2009, 29 (supplement), in press.

Song, J., Wang, Z., Jiang, Z., Han, Z., Chen, J., Song, Z., Shang, S., Chen, C. “Study of Structure-Activity Relationship and Repelling Mechanism,” *Chinese Journal of Hygiene Insect & Equipment*, 2008, 14, 472-476.

- Song, J., Wang, Z., Han, Z., Jiang, Z., Zheng, W., Chen, J., Song, Z., Shang, S. "Quantitative Structure-Activity Relationship of Terpenoid Aphid Antifeedants," *Journal of Agriculture and Food Chemistry*, 2008, 56, 11361-11366.
- Song, J., Wang, Z., Chen, J., Song, Z., Shang, S., Jiang, Z., Han, Z. "QSAR Study of Mosquito Repellents From Terpenoid With a Six-Member-Ring," *Bioorganic & Medicinal Chemistry Letters*, 2008, 18, 2854-2859.
- Song, J. "Theoretical Investigation of Methylene: Using Ultrahigh Accurate MRCI Approach," *Journal of Theoretical and Computational Chemistry*, 2007, 6, 905-914.
- Song, J., Aprá, E., Khait, Y. G., Hoffmann, M. R., Kowalski, K. "High-level ab initio Calculations on the NiO₂ System," *Chemical Physics Letters*, 2006, 428, 277-282.
- Song, J., Vaziri, M. "A Study on Electronic and Structural Properties of C₂₈ and C₁₆N₁₂" *Molecular Physics*, 2006, 104, 319-323.
- Song, J., Zand, A., Wagner, P., Tischler, J. "Investigation of Tubulin Polymerizing Agents: Synthesis of Substituted Cyclooctatrienes as a Possible Taxoid Framework," *Letters in Drug Design & Discovery*, 2005, 2, 355-363.
- Song, J., Gordon, M. S., Deakyne, C. A., Cui, Z. W. "Theoretical Investigations of Acetylcholine and Acetylthiocholine Using *ab initio* and Effective Fragment Potential Methods," *Journal Physical Chemistry A*, 2004, 108, 11419-11432.
- Song, J., Khait, Y. G., Hoffmann, M. R. "Macroconfiguration in Molecular Electronic Structure: Theory," *International Journal of Quantum Chemistry*, 2004, 99, 210-220.

Service – Professor Song has a solid record of extensive and committed service, in particular to his department, has served on multiple search committees in the College, and has been elected to the College's Academic Standards Committee. He has reviewed a large number of articles and textbooks for journals and publishers, which provides evidence of his growing prominence in his profession.

External Reviewers:

Reviewer (A):

"Prof. Song lists seven publications stemming from his pre-tenure efforts, and three additional manuscripts that are well on their way to publication. Averaging nearly two publications per year is outstanding for a pre-tenure faculty member."

Reviewer (B):

"... I see Dr. Song's scholarly output as exceptional, both the number of papers he has authored or co-authored, the number of grants submitted and conferences attended."

Reviewer (C):

"He has extensively studied a series of terpenoid compounds which can be used as low-toxicity mosquito, ant and bedbug repellents, and insect antifeedants. The findings are not only insightful but practical in the further rational design of better chemicals for pest controls. This kind of research is highly valuable with the potential of patents."

Reviewer (D):

"Jie Song's publication and research record is excellent for a faculty member in an undergraduate institution with a 22 contact hour load per academic year. The publications involving undergraduates are also high commendable."

Reviewer (E):

"With regard to Dr. Song's record of publication ... the overall quality and number of articles published since he has been at University of Michigan-Flint is quite impressive, particularly given the heavy teaching load that faculty members carry there."

Summary of Recommendation:

Through fine teaching and service and outstanding scholarship, Professor Song has earned the unanimous endorsement of the College of Arts And Sciences Executive Committee and the Dean for promotion. We therefore unanimously recommend Jie Song for promotion to associate professor of chemistry, with tenure, Department of Chemistry and Biochemistry, College of Arts and Sciences.

Recommended by:



D. J. Trela, Dean
College of Arts and Sciences

Recommendation endorsed by:



Vahid Lotfi, Interim Provost and
Vice Chancellor for Academic Affairs



Ruth J. Person, Chancellor
University of Michigan-Flint

May 2010