Postdoctoral Opportunities in the Cramer Group at the University of Minnesota

I am looking for multiple talented individuals interested in a postdoctoral position in my Minnesota research group. Ideally, applicants will have experience in the theory and use of classical and quantum chemical models as they are applied to one or more of (i) homogeneous catalysis, particularly for polymerization (ii) heterogeneous catalysis, particularly in mesoporous materials (e.g., metal-organic frameworks), and (iii) hard/soft matter interfaces in general, again with special emphasis on metal-organic frameworks.

Irrespective of specific, prior, scientific training, applicants should also be interested in working with, and assuming leadership positions in, teams of researchers associated with one or more of Minnesota’s:

- Center for Sustainable Polymers (https://csp.umn.edu)
- Inorganometallic Catalyst Design Center (http://www1.chem.umn.edu/icdc/)
- Nanoporous Materials Genome Center (http://www1.chem.umn.edu/nmgc/)

I am committed to fostering a research environment that allows junior scientists to grow professionally (please see attached postdoctoral mentoring plan for more details). I value diversity and the greater creativity that can spring from diverse teams, so I particularly encourage applications from individuals who identify with historically underrepresented groups in STEM disciplines. Appointments will be for one year, renewable upon mutual agreement, with a starting salary of $48,000 per year or higher, depending on experience.

Inquiries/applications may be directed to cramer@umn.edu.

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Distinguished McKnight, and University Teaching Professor of Chemistry and Associate Dean for Academic Affairs
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Mentoring Plan for Postdoctoral Associates

Postdoctoral associates have different career goals: Some are focused on continuing in academia, some look to a future in industry, others may intend to transition to related areas in business, policy, media, or technology. Each individual therefore has different mentoring needs, although certain common themes tend to be present. The following represents my general philosophy with respect to mentoring postdoctoral associates.

1) A postdoctoral associate in addition to being an active researcher should also exercise his or her ability to guide the research of co-workers. I will encourage the associate to take an active interest in all research projects in my group so that his/her expertise may inform the activities of my other co-workers, and I will further ensure that he or she familiarizes with our experimental partners (which will represent an excellent opportunity to compare and contrast the theoretical and experimental research environments). With respect to direct management, I will encourage him or her to act as the direct supervisor of any undergraduate who expresses interest in working specifically on the postdoctoral associate’s project (so long as the number of individuals does not grow unwieldy). I will actively monitor that relationship and make suggestions as warranted so that the associate will gain management experience as well as team-research experience.

2) I will encourage the active participation of the associate in Responsible Conduct of Research opportunities. Such opportunities, which include seminars, short courses, and interactive electronic presentations, are offered routinely throughout the year at the University of Minnesota (since grad students and faculty have their own RCR requirements to fulfill).

3) Ability to present research results in an informative and professional manner is a critical skill for any STEM researcher. The associate will make presentations routinely at group meetings and will moreover be expected to make a poster or oral presentation at a national or international meeting. I will review a preliminary version of such effort(s) and provide constructive feedback.

4) I will offer participation/training in the preparation of grant proposals consistent with the interest area(s) of the associate. I will expect and provide feedback on the preparation of initial drafts of manuscripts deriving from the associate’s own research. In this way, the associate’s written presentation skills will be further developed.

5) At the appropriate point, I will have discussions with the associate about his or her future plans and make suggestions with respect to opportunities and/or further recommended training. I will review application materials like research proposals and resumes and provide constructive feedback. The successful transition of a postdoctoral associate to a rewarding follow-on position and career is a critical priority for me. I am proud of the excellent success that my many prior postdoctoral associates have had in finding meaningful employment.