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Biocomplexity Faculty Search Committee
c/o Professor Rob de Ruyter van Steveninck
Biocomplexity Institute
Indiana University
Swain Hall West 117
Bloomington, IN 47405-7105

Dear Professor:

I am writing to support the application of Ronen Zangi for the position of Assistant Professor at Indiana University.

Ronen Zangi carried out his Ph.D. research with me. He is a very intelligent, original, and hard working young scientist. Throughout the course of his dissertation research he was very independent, and he several times demonstrated the ability to learn new material rapidly and to apply what he had learned in novel ways. Ronen's Ph.D. research involved computer simulations of the character of quasi-two dimensional colloid suspensions. In particular, that research focused attention on the structures of the several phases that can be supported in such systems, and the character of the transitions between phases that occur when the density and/or the thickness of the suspension is varied. He introduced clever strategies that aided the execution of the calculations and demonstrated considerable insight in the interpretation of the results. He also demonstrated an unusually mature and critical assessment of the results of the calculations and of the theories being tested.

After leaving Chicago Ronen took a position as a postdoctoral research associate in the University of Groningen. One motivation for this choice was his wish to broaden his education with research on bio-molecular systems. Although I have not followed his work there in detail, I am aware that it involved further development of computer simulation methodology and its application to interesting "soft matter" problems. While in Groningen Ronen completed two problems left unfinished when he departed from Chicago. One of these deals with the role of internal degrees of freedom in determining the phase diagram of Langmuir monolayers. The other deals with a novel interpretation, drawn from simulation data, of relaxation dynamics in a dense quasi-two-dimensional colloid assembly. Both are excellent contributions.

Ronen brings to any enterprise he undertakes a superb background in physical chemistry and computer simulation studies, excellent physical insight and a keen eye for the importance of a problem. I am confident that he will develop an innovative research program that will further the development of the theory of confined dense soft matter and that will stimulate new experiments. I rank him in the top 15% of the 99 Ph.D. students I have directed in 47 years at The University of Chicago. I recommend him, in the strongest possible terms, for a faculty position at Indiana University .

Very truly yours,



Stuart A. Rice

Frank P. Hixon Distinguished Service Professor