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Committee on Identifying Opportunities at the Interface of Chemistry and Quantum Information Science

Information Gathering Session I

Agenda

March 11, 2022, 2:15-5:30pm EST

Zoom Information

Join by computer:

https://nasem.zoom.us/j/93932702367?pwd=UVdZeTN5a0V4OHY0NWYxRFVyNyt2dz09

Join by Phone:

US: +1 (646) 518 9805 **Meeting ID:** 939 3270 2367

Password: 485595

2:15 Welcome and Introductions

Theodore Goodson, *Committee Chair*The Richard Bernstein Collegiate Professor of Chemistry University of Michigan

Session I. History and Outlook on Scalability

2:20: David Awschalom, Opportunities for Chemistry in Quantum Information Science

Liew Family Professor University of Chicago QIS Group Leader, Materials Science Division Argonne National Laboratory

2:50 **Q&A with Committee**

Brenda Rubenstein (moderator) Joukowsky Family Assistant Professor of Chemistry Brown University

3:05 Michael Wasielewski, Molecular Systems for Quantum Information Science

Clare Hamilton Hall Professor of Chemistry Northwestern University

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3:35 **Q&A with Committee**

Stephen Hill (moderator)
Professor of Physics
Director of Electron Magnetic Resonance User Program
Department of Physics, Florida State University
National High Magnetic Field Laboratory

3:50 **Break**

Session II. Addressability, Scalability, and Molecular Architecture

4:00 Introduction

Theodore Goodson, *Committee Chair*The Richard Bernstein Collegiate Professor of Chemistry, University of Michigan

4:05 Roberta Sessoli, Magnetic Molecules in Hybrid Architectures for QIS

Professor of General and Inorganic Chemistry University of Florence

4:20 **O&A** with Committee

Danna Freedman (moderator)
F. G. Keyes Professor of Chemistry
Massachusetts Institute of Technology

4:35 Giulia Galli, Quantum Simulations and Quantum Information: A Key Feedback Loop

Liew Family Professor of Electronic Structure and Simulations University of Chicago

4:50 **Q&A with Committee**

Ryan Babbush (moderator) Head of Quantum Algorithms Staff Research Scientist Google, LLC

5:05 Closing Remarks

Theodore Goodson, *Committee Chair*The Richard Bernstein Collegiate Professor of Chemistry University of Michigan

5:10 Adjourn open session