Broader Impact

MRS Advances: Broader Impact

Associate Editor:

David F. Bahr, Purdue University

Principal Editor:

Miriam Rafailovich, SUNY at Stony Brook

MRS Advances Editorial Board:

Editor-in-Chief: David F. Bahr, Purdue University Asa Barber, University of Portsmouth, United Kingdom Meenakshi Dutt, Rutgers University Elizabeth L. Fleischer, Materials Research Society

Marian Kennedy, Clemson University Marilyn L. Minus, Northeastern University Roger J. Narayan, University of North Carolina/North Carolina State University Jeremy Theil, Mountain View Energy

Materials Research Society Editorial Office, Warrendale, PA:

Ellen W. Kracht, Publications Manager Susan Dittrich, Journals Editorial Assistant Kirby L. Morris, Journals Production Assistant Eileen M. Kiley, Director of Communications

Disclaimer

Authors of each article appearing in this Journal are solely responsible for all contents in their article(s) including accuracy of the facts, statements, and citing resources. Facts and opinions are solely the personal statements of the respective authors and do not necessarily represent the views of the editors, the Materials Research Society, or Cambridge University Press.

MRS Advances (EISSN: 2059-8521) is published by Cambridge University Press, One Liberty Plaza, Floor 20, New York, NY 10006 for the Materials Research Society.

Copyright © 2017, Materials Research Society. All rights reserved. No part of this publication may be reproduced, in any form or by any means, electronic, photocopying, or otherwise, without permission in writing from Cambridge University Press. Policies, request forms and contacts are available at: http://www.cambridge.org/rights/permissions/permission.htm. Permission to copy (for users in the USA) is available from Copyright Clearance Center at: http://www.copyright.com, email: info@copyright.com.

Purchasing Options:

Premium Subscription- Premium Subscription includes current subscription and one year's lease access to the full MRS Online Proceedings Library Archive for \$7,219.00 / £4,888.00 / €6,647.00. Subscription Subscription with perpetual access to the content subscribed to in a given year, including three years 5 of back-file lease access to content from the MRS Online Proceedings Library Archive. The price for a 2017 subscription is \$3,019.00 / £1,948.00 / €2,625.00. MRS Members- Access to MRS Advances 불is available to all MRS members without charge.

E Contact Details:

Efor all inquiries about pricing and access to MRS Advances, please get in touch via the following email addresses: onlog eligible (for UK, Europe, and cambridge.org/adv email addresses: online@cambridge.org (for the Americas); library.sales@cambridge.org (for UK, Europe, and rest of world).

CONTENTS

Turning High School Students into MRS Authors and Presenters: The Magic of the Garcia Summer Scholars Program 1621 Rebecca Isseroff, Julia Budassi, and Miriam Rafailovich
General Chemistry for Engineers in the 21st Century: A Materials Science Approach
Physical Physics – Getting Students Active in Learning Materials Science
From Stage to Classroom – the Transfer of Knowledge through the Festival "Science on Stage"
A Model for Materials Science in Physics and Chemistry Curricula and Research at a Primarily Undergraduate Institution 1651 Brandon Burnett, Colin Inglefield, and Kristin Rabosky
Teaching Materials Science and Engineering (MSE) in the Pre-college Classroom as a Vehicle for NGSS Implementation 1661 Nicole Granucci, Carol Jenkins, Melanie Bauer, Ashley L. Gard, Bryn Pinkerton, and Christine Broadbridge
High-impact Practices in Materials Science Education: Student Research Internships Leading to Pedagogical Innovation in STEM Laboratory Learning Activities
An Entrepreneurship Education Co-curricular Program to Stimulate Entrepreneurial Mindset in Engineering Students 1673 Moraima De Hoyos-Ruperto, Cristina Pomales-García, Agnes Padovani, and O. Marcelo Suárez
*Invited Paper