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Solid Oxide Fuel Cell Components

Interfacial Compatibility of SOFC Glass Seals

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ISBN 978-3-319-25596-5   ISBN 978-3-319-25598-9 (eBook)
DOI 10.1007/978-3-319-25598-9

Library of Congress Control Number: 2015953005

Springer Cham Heidelberg New York Dordrecht London

Printed on acid-free paper

Springer International Publishing AG Switzerland is part of Springer Science+Business Media
(www.springer.com)

A dedication to my teachers, who have such big souls ... (Dr. O.P. Pandey, Dr. Kulvir Singh, Dr. B. Chudasama, Dr. Gary Pickrell, Dr. N. Sriranganathan and the Physics Department, GNDU, Amritsar).

Acknowledgments

During my journey of writing this book, there were many people who knowingly and unknowingly helped me in the successful completion of this project. At this overwhelming moment of accomplishment, first of all I am indebted to Drs. O.P. Pandey, Kulvir Singh, B. Chudasama, Gary Pickrell and N. Sriranganathan, whose understanding, encouragement and personal attention have always provided decisive and energetic support. Dr. Pandey stood by me during my struggling days and is one of the strongest pillars of my career. Without his support I would have never been able to accomplish most of the milestones of my career. Dr. Singh always invested extra hours in my work to churn the best out of it and was a wonderful mental booster. He gives reasonable freedom to his students so that they can add wings to their imagination. I feel honoured to have worked as a Ph.D. graduate under such talented supervisors, whose souls are big enough to accommodate every aspect of their students. Their diligence, persistence and vitality are highly admirable.

I have never seen a more dedicated and hardworking supervisor than Dr. Chudasama who always came forward for his students and never left any stone unturned so as to help them reach the zenith. Drs. Gary Pickrell and N. Sriranganathan provided the most conducive and comfortable environment to me during my stay in the United States and were superb mentors; they were an indispensable part of my journey.

A big chunk of thanks goes to Dr. Gopalan, Director, Thapar University for endowing us all with a zeal to move forward. His rational attitude toward problem analysis is really laudable. All the faculties and staff of the Physics Department (Guru Nanak Dev University), SPMS (Thapar University) and MSE (Virginia Tech, USA) are acknowledged, as they never turned me down whenever I approached them for help. I cannot forget the very supportive and cordial attitude of Dr. Manoj Sharma, HOD, SPMS, who is always ready to help his students. This truly demonstrates his excellent administrative qualities. I also cannot forget the support provided by Dr. S.S. Sekhon during the toughest phase of my life. His motivation and zeal for hard work enlightened my path always. I am so grateful to the UGC, New Delhi for the financial assistance provided to me [F.15-1/2013-14/PDFWM-2013-14-GE-PUN-14803(SA-II)] during the course of my work.

This book emerged amid friendships that provided lasting lessons. It is a pleasure to mention my good friends, especially from the Functional Materials Lab, Ceramic Research Lab, Nanomedicine Lab and NanoMaterials Lab, who made my working atmosphere very conducive.

Finally, my greatest personal source of gratitude is my soul mate and my husband, Dr. Vishal Kumar, who is my enduring strength. He erased the word ‘nightmare’ from the dictionary of my life. During every downturn of my life, he uplifted my spirits and helped me in innumerable ways. It is only due to him that I could put in a lot of working hours tirelessly. He sheltered me through every situation and took my entire burden off my shoulders. He was full of patience and support when my work schedule became too hectic. This book would not have been possible without him. He was concerned about my important schedules and kept reminding me about them, along with my diet chart!

Dear Mom and Dad, I have let so many years pass without thanking you both for your unconditional love. I am thankful to my parents and to my parents-in-law for their support, encouragement, care, understanding and for creating a pleasant atmosphere for me. My father-in-law, Sh. Surinder Kumar, and my father, Sh. Harbhajan Singh, have both been strong pillars of my career and have always motivated me to fly high and transform my dreams into realities. I am lucky to have such wonderful in-laws to whom I am more like a daughter. I doubt that I will ever be able to convey my appreciation fully, but I owe them my eternal gratitude.

Above all, thanks to the Almighty for bestowing me with his precious blessings! With every passing day, I believe in the Almighty more and more as He has filled my life with wonderful things which I could never have imagined. Thanks for protecting me, sheltering me and for blessing me in the best ways possible!!

Dr. Gurbinder Kaur

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Author Biography

Dr. Gurbinder Kaur received her B.Sc (Hons. Physics) and M.Sc. (Hons. Physics) from Guru Nanak Dev University, Amritsar. Dr. Gurbinder began her teaching career at D.A.V. College, Amritsar, where she taught from 2004 to 2005. Her second academic appointment was at RR Bawa DAV College, Batala, where she served as Head of the Physics Department from 2005 to 2009. Then, she moved to Thapar University, Patiala, to pursue her research work in the field of solid oxide fuel cells (SOFCs) and received her doctorate in 2012. Her Ph.D. dissertation was based on 'Investigations on interfacial interaction of glass sealants with electrolytes and interconnect for solid oxide fuel cells (SOFC)'. She has published more than 35 research papers in the field of materials science. She has published a book on *Modern Physics* by McGraw Hill Pvt. Ltd. She has also carried out research in the field of biomedical engineering and bioglasses. She is a recipient of a research fellowship of the RFSMS scheme of the University Grants Commission (UGC). She also received a fellowship under the Women Scientist Scheme, DST, New Delhi, from 2010 to 2012. After completing her doctorate, she moved to Virginia Tech, USA, to work as a postdoctoral fellow with Dr. Gary Pickrell. She is a recipient of a postdoc scholarship from UGC, New Delhi, for pursuing research work in the field of bioglasses. She works on a variety of different materials and applications including high-temperature energy materials, bioactive materials and optical materials.

Contributor Biography

Dr. Vishal Kumar completed his M.Tech (materials science and engineering) from Thapar University, Patiala, in 2007. He was awarded his Ph.D. in 2010 on the topic 'Study of SiO_2- B_2O_3 based glasses and glass ceramics as sealants'. He has been granted scholarships by funding agencies including CSIR and DST, New Delhi, to pursue his research work. He was awarded a Fulbright Fellowship by USIEF to pursue his research on glasses with Dr. Kathy Lu at Virginia Tech, Blacksburg, USA. His objective was "Study and development of materials for increasing the power generation efficiency of Solid Oxide Fuel Cells (SOFC)."