

Thermoelastic Modeling in Homogeneous & Functionally Gradient Material

Recent advances in the mathematical formulations for structural design optimization using thermoelasticity concepts play pivotal role in the development of science and technology especially aerospace engineering. As thermoelasticity is a branch of science that deals with the analysis of stresses caused by thermally induced strains which are in the elastic (recoverable) range, but the material interfaces also plays a pivotal role in the actual performance of a structure, often dictating lifetime and failure characteristics, tolerances and processing choices. The motivation of the present study is to highlight the influence of materials (i.e. homogeneous and non-homogeneous) during thermoelastic engineering problems involving structural compliances. To understand this book one must have knowledge of Residue Theory, Differential Equation, Analysis, Integral Transform and Thermoelasticity. The investigations in the present volume are based on the research work of Roychoudhury, Chenet, Tanigawa, Noda, Deshmukh, Ersilan, Wankhede and Nowacki where they have studied the direct and inverse problems of thermoelasticity on homogeneous and functionally gradient materials.

Dr. Dilip Kamdi- HoD, Rashtrapita M.G. College, Saoli-Chandrapur, 8 Research Papers and 7 books published; Dr. Vinod Varghese- 21+years of Industrial Exp.; Prime Ministers 'Shram Veer Award - 2013' Winner, Black Belt-ASQ, 31 Papers and 4 books published; Dr. Lalsingh Khalsa-Principal at M.G. College, Armori, Gadchiroli, 21 Papers and 4 book published.



978-3-639-85948-5

Thermo Modeling in Homogeneous and FGMS

Kamdi, Varghese, Khalsa

Scholars'
Press

Dilip Kamdi
Vinod Varghese
Lalsingh Khalsa

Thermoelastic Modeling in Homogeneous & Functionally Gradient Material

Thermal response studies on different materials



Principal
Mahatma Gandhi Arts,
Science & Late
N.P. Commerce College,
Armori, Dist - Gadchiroli

Impressum / Imprint

Bibliografische Information der Deutschen Nationalbibliothek: Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über <http://dnb.d-nb.de> abrufbar.

Alle in diesem Buch genannten Marken und Produktnamen unterliegen warenzeichen-, marken- oder patentrechtlichem Schutz bzw. sind Warenzeichen oder eingetragene Warenzeichen der jeweiligen Inhaber. Die Wiedergabe von Marken, Produktnamen, Gebrauchsnamen, Handelsnamen, Warenbezeichnungen u.s.w. in diesem Werk berechtigt auch ohne besondere Kennzeichnung nicht zu der Annahme, dass solche Namen im Sinne der Warenzeichen- und Markenschutzgesetzgebung als frei zu betrachten wären und daher von jedermann benutzt werden dürften.

Bibliographic information published by the Deutsche Nationalbibliothek: The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at <http://dnb.d-nb.de>.

Any brand names and product names mentioned in this book are subject to trademark, brand or patent protection and are trademarks or registered trademarks of their respective holders. The use of brand names, product names, common names, trade names, product descriptions etc. even without a particular marking in this work is in no way to be construed to mean that such names may be regarded as unrestricted in respect of trademark and brand protection legislation and could thus be used by anyone.

Coverbild / Cover image: www.ingimage.com

Verlag / Publisher:

Scholar's Press

ist ein Imprint der / is a trademark of

OmniScriptum GmbH & Co. KG

Bahnhofstraße 28, 66111 Saarbrücken, Deutschland / Germany

Email: info@scholars-press.com

Herstellung: siehe letzte Seite /

Printed at: see last page

ISBN: 978-3-639-85948-5

Zugl. / Approved by: Nagpur University, 2009

Copyright © 2016 OmniScriptum GmbH & Co. KG

Alle Rechte vorbehalten. / All rights reserved. Saarbrücken 2016

Thermoelastic Modeling in Homogeneous and Functionally Gradient Materials

Thermal response studies on different materials

Dilip KAMDHI
Vinod VARGHESE
Lalsingh KHALSA



P. K. Rai
Mahatma Gandhi Arts,
Science & Late
N. P. Commerce College,
Amroli, Dist - Gadchiroli