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ENERGY
EFFICIENCY IN
BUILDING
ENVELOPE

POSITIVE BUILDING
BUILDING +

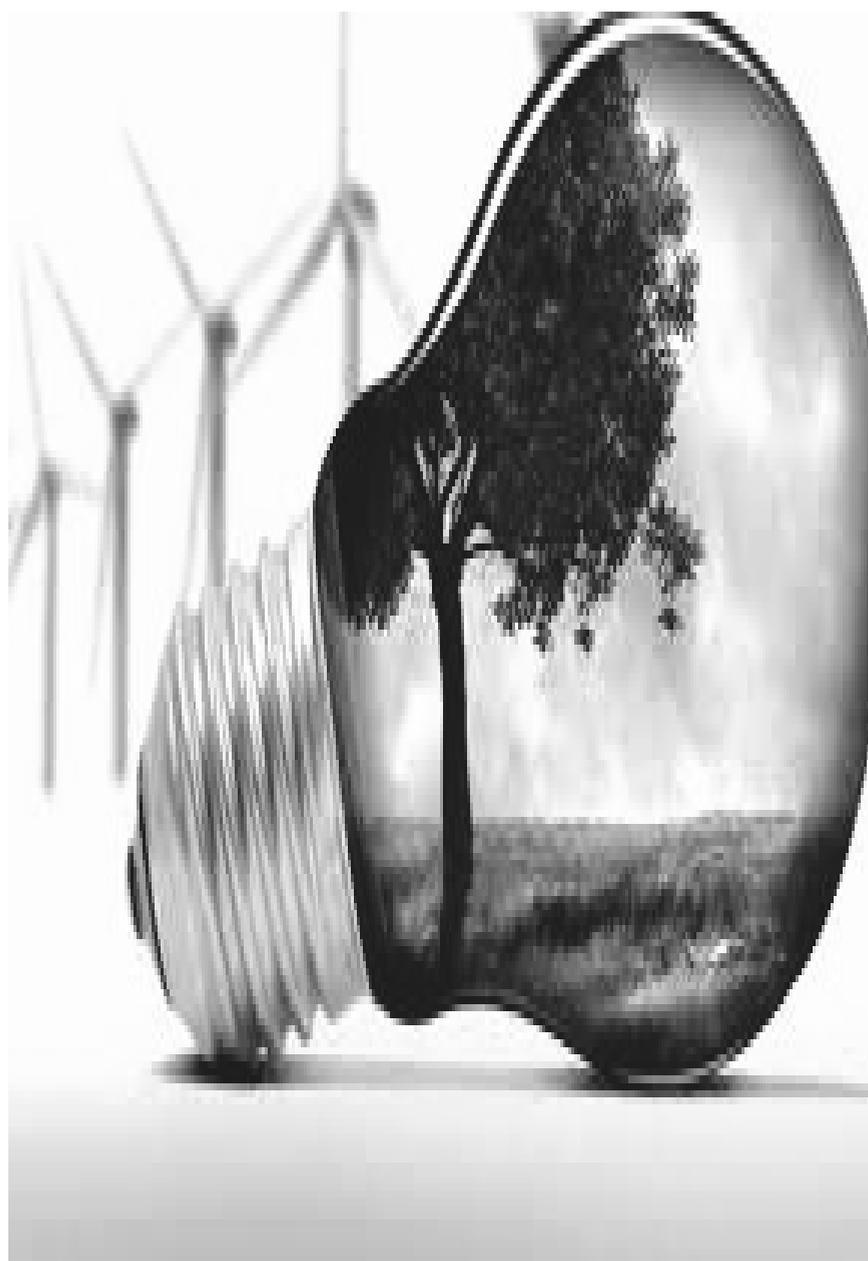
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SPECIALITY; Engineering science

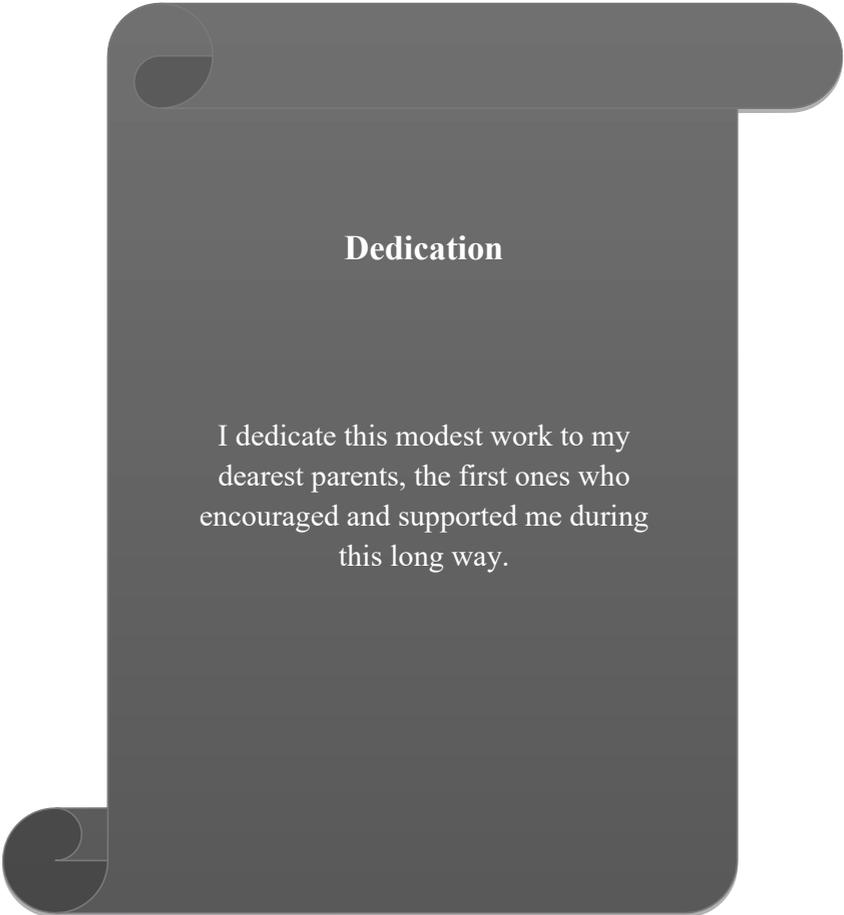
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{Architecture is a wonderful expression of the discovery process. It's like a scientist who doesn't know the answer, but knows the path to it. That's what drives me: the joy of the path, the discovery."}

Glenn Murcutt Architect, winner of
the 2002 Pritzker Architecture Prize



...A My BENACHIR Nouhaila



Dedication

I dedicate this modest work to my
dearest parents, the first ones who
encouraged and supported me during
this long way.

Dedication

Thanks

"Praise be to GOD, lord and master of the universes".

I would like to express my thanks to a whole world of people who have made this study possible and who have contributed to its elaboration in any form.

I address myself to GOD, the almighty, to thank him for having given me the courage, the support, the patience to carry out this work.

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Benachir Nouhaila International Journal of Engineering and Applied Physics (IJEAP) Vol. 2, No. 3, September 2022. ISSN : 2737-8071. Simulation of solar mechanical ventilation with phase change materials in building envelope with 2 software TRNSYS and DESIGNBUILDER. Received June 9, 2022 Revised November 20, 2022 Accepted January 11, 2022. Int J Eng & App Phy, Vol. 2, No. 3, September 2022.