



ISSN No. : 2321-9653

IJRASET

**International Journal for Research in Applied
Science & Engineering Technology**

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : www.ijraset.com, E-mail : ijraset@gmail.com

ISRA
JIF

ISRA Journal Impact
Factor: 7.429



45.98
INDEX COPERNICUS



THOMSON REUTERS
Researcher ID: N-9581-2016



TOGETHER WE REACH THE GOAL
SJIF 7.429

Certificate

It is here by certified that the paper ID : IJRASET48751, entitled
Analysis of Artificially Roughened Solar Air Heater Duct Using Computational Fluid
Dynamics

by
N. Dilipsharma

after review is found suitable and has been published in
Volume 11, Issue I, January 2023
in

By [Signature]

Editor in Chief, IJRASET

*International Journal for Research in Applied Science &
Engineering Technology*
(International Peer Reviewed and Refereed Journal)
Good luck for your future endeavors



ISSN No. : 2321-9653

IJRASET

**International Journal for Research in Applied
Science & Engineering Technology**

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : www.ijraset.com, E-mail : ijraset@gmail.com

ISRA
JIF

ISRA Journal Impact
Factor: 7.429



45.98
INDEX COPERNICUS



THOMSON REUTERS
Researcher ID: N-9581-2016



10.22214/IJRASET



TOGETHER WE REACH THE GOAL
SJIF 7.429

Certificate

*It is here by certified that the paper ID : IJRASET48751, entitled
**Analysis of Artificially Roughened Solar Air Heater Duct Using Computational Fluid
Dynamics***

*by
N. Vadivel*

*after review is found suitable and has been published in
Volume 11, Issue I, January 2023
in*

By [Signature]

Editor in Chief, IJRASET

*International Journal for Research in Applied Science &
Engineering Technology
(International Peer Reviewed and Refereed Journal)
Good luck for your future endeavors*



ISSN No. : 2321-9653

IJRASET

**International Journal for Research in Applied
Science & Engineering Technology**

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : www.ijraset.com, E-mail : ijraset@gmail.com

ISRA
JIF

ISRA Journal Impact
Factor: 7.429



45.98
INDEX COPERNICUS



THOMSON REUTERS
Researcher ID: N-9581-2016



10.22214/IJRASET



TOGETHER WE REACH THE GOAL
SJIF 7.429

Certificate

*It is here by certified that the paper ID : IJRASET48751, entitled
**Analysis of Artificially Roughened Solar Air Heater Duct Using Computational Fluid
Dynamics***

*by
K. Ramesh*

*after review is found suitable and has been published in
Volume 11, Issue I, January 2023
in*

By [Signature]

Editor in Chief, IJRASET

*International Journal for Research in Applied Science &
Engineering Technology
(International Peer Reviewed and Refereed Journal)
Good luck for your future endeavors*



ISSN No. : 2321-9653

IJRASET

**International Journal for Research in Applied
Science & Engineering Technology**

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : www.ijraset.com, E-mail : ijraset@gmail.com

Certificate

It is here by certified that the paper ID : IJRASET48751, entitled
Analysis of Artificially Roughened Solar Air Heater Duct Using Computational Fluid
Dynamics

by
D. Kulandaivel

after review is found suitable and has been published in
Volume 11, Issue I, January 2023
in

*International Journal for Research in Applied Science &
Engineering Technology*
(International Peer Reviewed and Refereed Journal)
Good luck for your future endeavors

By [Signature]

Editor in Chief, IJRASET

ISRA
JIF

ISRA Journal Impact
Factor: 7.429



45.98
INDEX COPERNICUS



THOMSON REUTERS
Researcher ID: N-9581-2016



TOGETHER WE REACH THE GOAL
SJIF 7.429



ISSN No. : 2321-9653

IJRASET

**International Journal for Research in Applied
Science & Engineering Technology**

IJRASET is indexed with Crossref for DOI-DOI : 10.22214

Website : www.ijraset.com, E-mail : ijraset@gmail.com

ISRA
JIF

ISRA Journal Impact
Factor: 7.429



45.98
INDEX COPERNICUS



THOMSON REUTERS
Researcher ID: N-9581-2016



TOGETHER WE REACH THE GOAL
SJIF 7.429

Certificate

*It is here by certified that the paper ID : IJRASET48751, entitled
**Analysis of Artificially Roughened Solar Air Heater Duct Using Computational Fluid
Dynamics***

*by
M. Shoban Babu*

*after review is found suitable and has been published in
Volume 11, Issue I, January 2023
in*

By [Signature]

Editor in Chief, IJRASET

*International Journal for Research in Applied Science &
Engineering Technology
(International Peer Reviewed and Refereed Journal)
Good luck for your future endeavors*