



Certificate of Publication



This is to confirm that

Jinnan Ni

Published following article

**Numerical Minimal Distance between Two Arbitrary
Catenaries in 3D Space**

Volume 9, Issue 10, pp: 98-106

www.ijres.org

A Peer Reviewed referred Journal

**International Journal of Research in Engineering and
Science (IJRES)**

ISSN: 2320-9364 IJRES is Peer Reviewed Refereed.

Editor-In-Chief



Certificate of Publication



This is to confirm that

Zihe Yang

Published following article

**Numerical Minimal Distance between Two Arbitrary
Catenaries in 3D Space**

Volume 9, Issue 10, pp: 98-106

www.ijres.org

A Peer Reviewed referred Journal

**International Journal of Research in Engineering and
Science (IJRES)**

ISSN: 2320-9364 IJRES is Peer Reviewed Refereed.

Editor-In-Chief