# LIST OF PUBLICATIONS

# a) Research paper in the journals

- Piyush Patel, Piyush Gohil (May 2022). "Custom orthotics development process based on additive manufacturing", Materials Today: Proceedings, Volume 59, Part 3, 2022, Pages A52-A63.
  *DOI*: https://doi.org/10.1016/j.matpr.2022.04.858.
  *Indexed by:* SJR, Scopus, Web of Science/Clarivate Analytics, UGC Care List.
  *Impact Factor (TR):* 1.46, SJR Rank: 0.355 | 2022, Scopus Cite Score: 2.3| 2022
  *ISSN:* ISSN: 2214-7853 (Online).
- 2) Piyush Patel, Piyush Gohil (August 2021). "Role of additive manufacturing in medical application COVID-19 scenario: India case study", Journal of Manufacturing Systems, Volume 60, 2021, Pages 811-822. *DOI:* https://doi.org/10.1016/j.jmsy.2020.11.006. *Indexed by:* SJR, Scopus, Web of Science/Clarivate Analytics, UGC Care List. *Impact Factor (TR):* 9.498, SJR Rank: 2.95 | 2022, Scopus Cite Score: 15| 2022 *ISSN*: Online ISSN: 1878-6642 Print ISSN: 0278-6125
- Design and Simulation Approach of Cerebral Palsy Pediatric Standard Walker (Elsevier Journal: *Medicine in Novel Technology and Devices*: Manuscript No: MEDNTD-D-23-00002R1: Under Review Process)
- 4) Design, Analysis and Development of Prosthetic and Orthotic elements by Additive Manufacturing process (Springer Journal: *Biomedical Engineering Letter:* Manuscript No:BMEL-D-23-00319 : Under Review process)
- Design, Analysis, Development and Testing of Novel Prosthetic foot model for lower limb amputation level patients (Elsevier Journal: Composite communication, Manuscript No: COCO-D-23-00508: Under Review process)

# b) Presenting research work at conferences

- 1) Custom Orthotics development process based on Additive Manufacturing (International Conference on Materials and Technologies: NIT Raipur)
- 2) Design and Simulation Approach of Cerebral Palsy (CP) Pediatric Walker (International Conference on Materials and Technologies: NIT Raipur)



NATIONAL INSTITUTE OF TECHNOLOGY RAIPUR (An Institute of National Importance)

SECOND INTERNATIONAL CONFERENCE ON MATERIALS AND TECHNOLOGIES

## MaterialTECH2022

28th - 29th January, 2022

# Certificate

This certificate is presented to

#### Mr. PIYUSH THAKORBHAI PATEL

for Oral Presentation of Paper Design and Simulation Approach of Cerebral Palsy (CP) Pediatric Standard Walker in the International Conference "Material TECH 2022" organized jointly by Department of Metallurgical and Materials Engineering & Department of Mechanical Engineering at National Institute of Technology Raipur, India.

> Dr. N V Swamy Naidu (Organizing Secretary)

Dr. Neha Gupta (Organizing Secretary) Dr Jagadish (Organizing Secretary)

## c) Book chapter

 Piyush Patel, Piyush Gohil, Vijay Parmar (July 2021). "Bio Composite Material: Review and its Applications in Various Fields", Encyclopedia of Materials: Composites, Elsevier, 2021, Pages 80-93, ISBN 9780128197318, https://doi.org/10.1016/B978-0-12-819724-0.00011-2.

# d) Patent Publication

 Product Patent entitled "Multiaxial foot-ankle mechanism for prosthetic legs" granted on 14-03-2024 (Patent No: 526523).

कम रॉ/SL No :02214188 ROPERTY INDIA पेटेंट कार्यालय, भारत सरकार The Patent Office, Government Of India पेटेंट प्रमाण पत्र | Patent Certificate (Rule 74 of The Patents Rules) (पेटेंट नियमावली का नियम 74) 526523 पेटेंट सं. / Patent No. 202221034314 आबेदन सं. / Application No. 15/06/2022 फाइल करने की तारीख / Date of Filing 1 Mr. PIYUSH THAKORBHAI PATEL 2 Dr. PIYUSH पेरेंटी / Patentee PRAGJIBHAI GOHIL 3.Dr. VEERENDRA KISHAN SHANDILYA प्रमाणित किया जाता है कि पेटेंटी को, उपरोक्त आवेदन में यथाप्रकटित MULTIAXIAL FOOT-ANKLE MECHANISM FOR PROSTHETIC LEGS नामक आविष्कार के लिए, पेटेंट अधिनियम, 1970 के उपबंधों के अनुसार आज तारीख जून 2022 के पंद्रहवें दिन से बीस वर्ष की अवधि के लिए पेटेंट अनुदत्त किया गया है। It is hereby certified that a patent has been granted to the patentee for an invention entitled MULTIAXIAL FOOT-ANKLE MECHANISM FOR PROSTHETIC LEGS as disclosed in the above mentioned application for the term of 20 years from the 15th day of June 2022 in accordance with the provisions of the Patents Act, 1970. नी गांडिय अनुरान की तारीख Date of Grant : 14/03/2024 Controller of Patents the state - इस पेटेट के नवीकरण के लिए फीस, यदि इसे बनाए रखा जाना है, जून 2024 के प्रहवे दिन की और उसके प्रवाल प्रतीक क्वं में उसी दिन देश होगी Note. - The fees for renewal of this patent, if it is to be maintained, will fail / has failen due on 15th day of June 2024 and on the same day in every year thereafter