

IGNITE 2023



A DAILY NEWSLETTER

Editor in Chief

Dr. Srinivasan Alavandar
Principal, ACT

Editors

Ms. N Dhivya, AP - S&H
Ms. S Archana, AP - EEE
V. Kothantapani - EEE

BE AN ACTioneer, Aspire To BE the BEST



Agni College of Technology

Approved by AICTE / UGC, New Delhi, Accredited by NAAC & NBA, Affiliated to Anna University, Chennai.
ISO 9001:2015 Certified Institution: Estd.2001
OMR, Thalambur, Chennai - 600 130. Phone: 044 6740 9441 Mobile: 9445024081 www.act.edu.in



FACULTY ACHIEVEMENT



Intellectual Property India has granted a patent for **Multipurpose Agriculture Surveillance Drone** designed by Mr. Agnishwar Jayaprakash, Founder and CEO, Garuda Aerospace Pvt. Ltd., Vice Chairman, Agni College of Technology, and Dr. R. Pandiyarajan, Head, Department of Mechatronics Engineering, on November 20, 2023, with Design No:383724-001.

BE AN ACTIONeer, Aspire To BE the BEST

Agni College of Technology

Approved by AICTE / UGC, New Delhi, Accredited by NAAC & NBA, Affiliated to Anna University, Chennai.

ISO 9001:2015 Certified Institution: Estd.2001

OMR, Thalambur, Chennai - 600 130. Phone: ☎ 044 6740 9441 Mobile: 9445024081 www.act.edu.in



FACULTY ACHIEVEMENT



Intellectual Property India has granted a patent for **An Advanced Crop Growth and Yield Monitoring Drone** designed by Mr. Agnishwar Jayaprakash, Founder and CEO, Garuda Aerospace Pvt. Ltd., Vice Chairman, Agni College of Technology, and Dr. R. Pandayarajan, Head, Department of Mechatronics Engineering, on November 24, 2023, with Design No:383722-001.

BE AN ACTIONeer, Aspire To BE the BEST



Agni College of Technology

Approved by AICTE / UGC, New Delhi, Accredited by NAAC & NBA, Affiliated to Anna University, Chennai.
ISO 9001:2015 Certified Institution: Estd.2001
OMR, Thalambur, Chennai - 600 130. Phone: 044 6740 9441 Mobile: 9445024081 www.act.edu.in



FACULTY ACHIEVEMENT

The International Journal of Advanced Manufacturing Technology
<https://doi.org/10.1007/s00170-023-12662-w>

ORIGINAL ARTICLE

Check for updates

Industrial waste fly ash experimental research on the thermal, mechanical, and electrical characteristics of AA8011 metal matrix composites

Subramaniam Magibalan¹ · Vinayagam Mohanavel^{2,3} · Alagesan Sivapragasan⁴ · Arul Kulandaivel⁵ · Sathish Kannan^{3,6} · Yosef Jazaa⁷

Received: 16 March 2023 / Accepted: 9 November 2023
© The Author(s), under exclusive licence to Springer-Verlag London Ltd., part of Springer Nature 2023

Abstract

This novel research examined the response performance of monolithic aluminum alloy AA8011 reinforced with an industrial by-waste fly ash. The developed composites were fabricated by stir casting route with close consideration on the parametric process, and four varying weight compositions were established. Following the solidification of the composites, they were characterized by an optical microscope and the crystalline phase was revealed by X-ray diffraction. The micrograph revealed an even distribution of fly ash along the interface of grain boundaries with minimum porosity. The X-ray diffraction confirmed the peak intensity of the aluminum and the major constituents of fly ash, which were SiO₂, Al₂O₃, and Fe₂O₃ with no traceable intermetallic compound. Likewise, the mechanical strengths (flexural, impact, and compressive) were evaluated. The flexural and compressive strengths increased with the different percentages of fly ash, whereas the impact strength decreased. The corrosion rate was deduced from the anodic and cathodic extrapolation curves, and the result showed resistance to corrosion attack following the incorporation of the unreactive fly ash particles. The thermal behavior was analyzed using a thermogravimetric analyzer (TGA) and differential thermal analyzer (DTA). Researches reveal that TGA and DTA, in their respective capacities, were able to lower the composite mass loss elevated thermal properties, from around 667.6 °C, within the condition of fly ash addition as a ratio of the temperature increase.

Dr. Arul Kulandaivel, HoD, Department of Science and Humanities, has published a research paper, “Industrial waste fly ash experimental research on the thermal, mechanical, and electrical characteristics of AA801 metal matrix composites” in The International Journal of Advanced Manufacturing Technology, WoS Publications Q1 Ranking journal, Listed in Anna University Annexure-I Journal with Impact factor is 3.563,

BE AN ACTioneer, Aspire to be the BEST



Agni College of Technology

Approved by AICTE / UGC, New Delhi, Accredited by NAAC & NBA, Affiliated to Anna University, Chennai.
ISO 9001:2015 Certified Institution: Estd.2001
OMR, Thalambur, Chennai - 600 130. Phone: ☎ 044 6740 9441 Mobile: 9445024081 www.act.edu.in



DEPARTMENT MEETING



Dr. M. V. Ishwarya, Associate Professor and Head of the Department of Artificial Intelligence and Data Science, has conducted the **“Department Meeting”** on November 28, 2023.

Meeting Agenda:

1. Discussion of subject allocation for III Year VI Sem and II Year IV Sem
2. Discussion on autonomous readiness in the curriculum
3. Discussion on unique best practices to be followed in the college
4. Discussion on AQAR file completion status
5. Discussion on Individual and Department API Scores

BE AN ACTIONeer, Aspire To BE the BEST

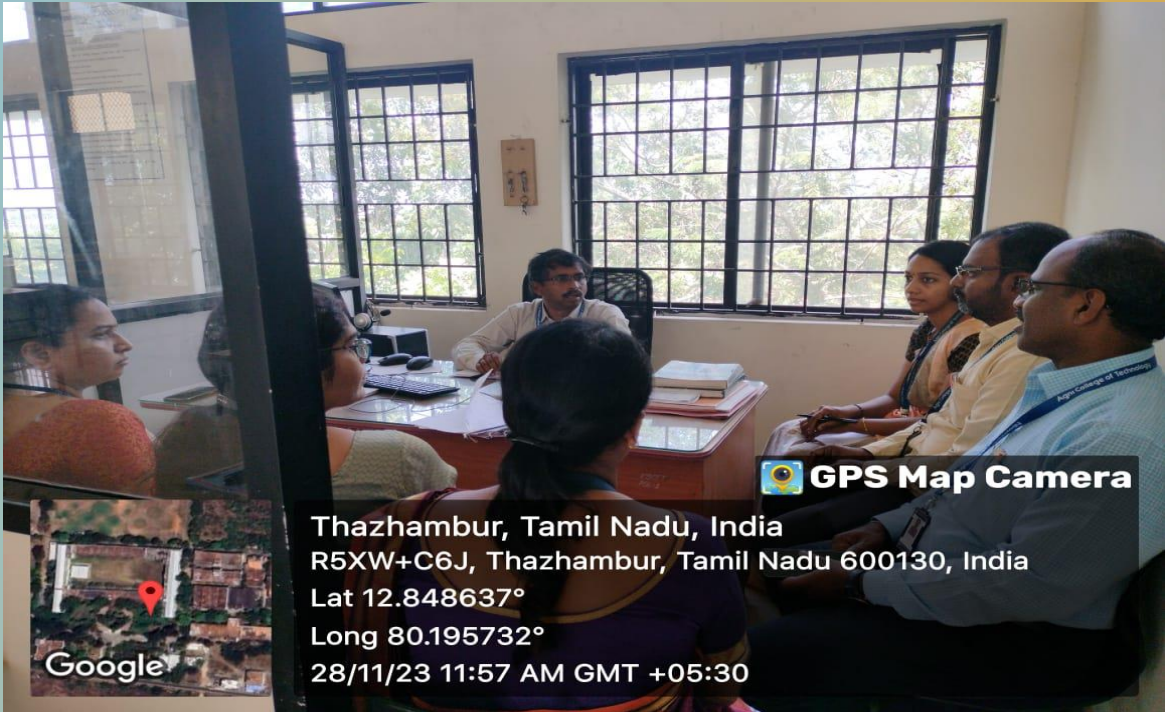


Agni College of Technology

Approved by AICTE / UGC, New Delhi, Accredited by NAAC & NBA, Affiliated to Anna University, Chennai.
ISO 9001:2015 Certified Institution: Estd.2001
OMR, Thalambur, Chennai - 600 130. Phone: 044 6740 9441 Mobile: 9445024081 www.act.edu.in



DEPARTMENT MEETING



The department meeting has been conducted by the HOD, **Department of Electrical and Electronics Engineering**, with all the faculties on November 28, 2023. File update for AQAR, subject selection allocation, academic curriculum for the upcoming semester, proper conduction of classes and API were discussed.

BE AN ACTIONeer, Aspire To BE the BEST

STUDENT PARTICIPATION

ERODE

ENTREPRENEURSHIP
CONCLAVE

23rd NOV 2023

Startup Mania 8.0

Let's get bizzy

ORGANIZED BY








CERTIFICATE OF PARTICIPATION

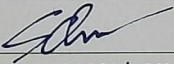
This is to certify that NANTHINI PRIYA . R has participate



the Finals of “Startup Mania” idea contest held on 23rd Nov 2023

under “Graduates & Startups” category.


 TBI@KEC


 NAN | NLF


 CII | YI

Associate Sponsors









EcoSystem Partner




Web Partner



Nanthini Priya.R., the founder of INCITUS Pvt Ltd. from the III-year IT Department, got selected as the **top 5** finalist in **Startup Mania 8.0**, organized by the **Erode Entrepreneurship Conclave** held on November 23, 2023, in Tamil Nadu.

BE AN ACTIONeer, Aspire To BE the BEST



Agni College of Technology

Approved by AICTE / UGC, New Delhi, Accredited by NAAC & NBA, Affiliated to Anna University, Chennai.
 ISO 9001:2015 Certified Institution: Estd.2001
 OMR, Thalambur, Chennai - 600 130. Phone: 044 6740 9441 Mobile: 9445024081 www.act.edu.in



STUDENT ACHIEVEMENT



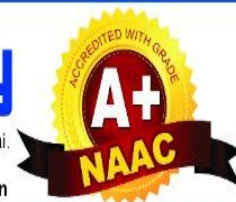
Vijayaa Rajah, II Year, Department of Aerospace Engineering, has participated in the **National Level Technical Symposium TECTRIX-2023**, which was held on October 10, 2023, organized by the Department of Information Security at SIMATS Engineering in Chennai.

BE AN ACTIONeer, Aspire To BE the BEST



Agni College of Technology

Approved by AICTE / UGC, New Delhi, Accredited by NAAC & NBA, Affiliated to Anna University, Chennai.
ISO 9001:2015 Certified Institution: Estd.2001
OMR, Thalambur, Chennai - 600 130. Phone: 044 6740 9441 Mobile: 9445024081 www.act.edu.in



CLUB ACTIVITY



The Department of Computer Science and Engineering has conducted a "QUIZ" on the topic "SPORTS" which was coordinated by Mrs.Suganya A, Assistant Professor, Computer Science and Engineering Department, for the II-year CSE A students on November 25, 2023.

BE AN ACTIONeer, Aspire To BE the BEST

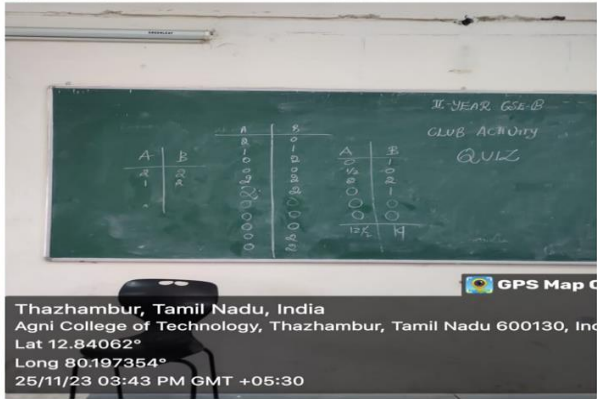


Agni College of Technology

Approved by AICTE / UGC, New Delhi, Accredited by NAAC & NBA, Affiliated to Anna University, Chennai.
ISO 9001:2015 Certified Institution: Estd.2001
OMR, Thalambur, Chennai - 600 130. Phone: 044 6740 9441 Mobile: 9445024081 www.act.edu.in



CLUB ACTIVITY



The Department of Computer Science and Engineering has conducted a "QUIZ" on the topic "TECHNICAL AND GENERAL" which was coordinated by Mrs.Sujatha MP, Assistant Professor, Computer Science and Engineering Department, for the II-year CSE B students on November 25, 2023.

BE AN ACTIONeer, Aspire To BE the BEST



Agni College of Technology

Approved by AICTE / UGC, New Delhi, Accredited by NAAC & NBA, Affiliated to Anna University, Chennai.
ISO 9001:2015 Certified Institution: Estd.2001

OMR, Thalambur, Chennai - 600 130. Phone: 044 6740 9441 Mobile: 9445024081 www.act.edu.in



STUDENT CORNER



Sheroll Faith, a second-year student in Electronics and Communication Engineering, showcased her artistic talent by creating a beautiful peacock using pencil on paper.

BE AN ACTioneer, Aspire To BE the BEST



Agni College of Technology

Approved by AICTE / UGC, New Delhi, Accredited by NAAC & NBA, Affiliated to Anna University, Chennai.
ISO 9001:2015 Certified Institution: Estd.2001
OMR, Thalambur, Chennai - 600 130. Phone: 044 6740 9441 Mobile: 9445024081 www.act.edu.in



STUDENT REPOSITORY



Tejashwini II year EEE has done a drawing which is like a breath of fresh air in the current climate. Its vibrant colors and joyful depiction remind us to embrace the beauty around us, even in challenging times. **Keep spreading positivity through your incredible talent!**

BE AN ACTioneer, Aspire To BE the BEST

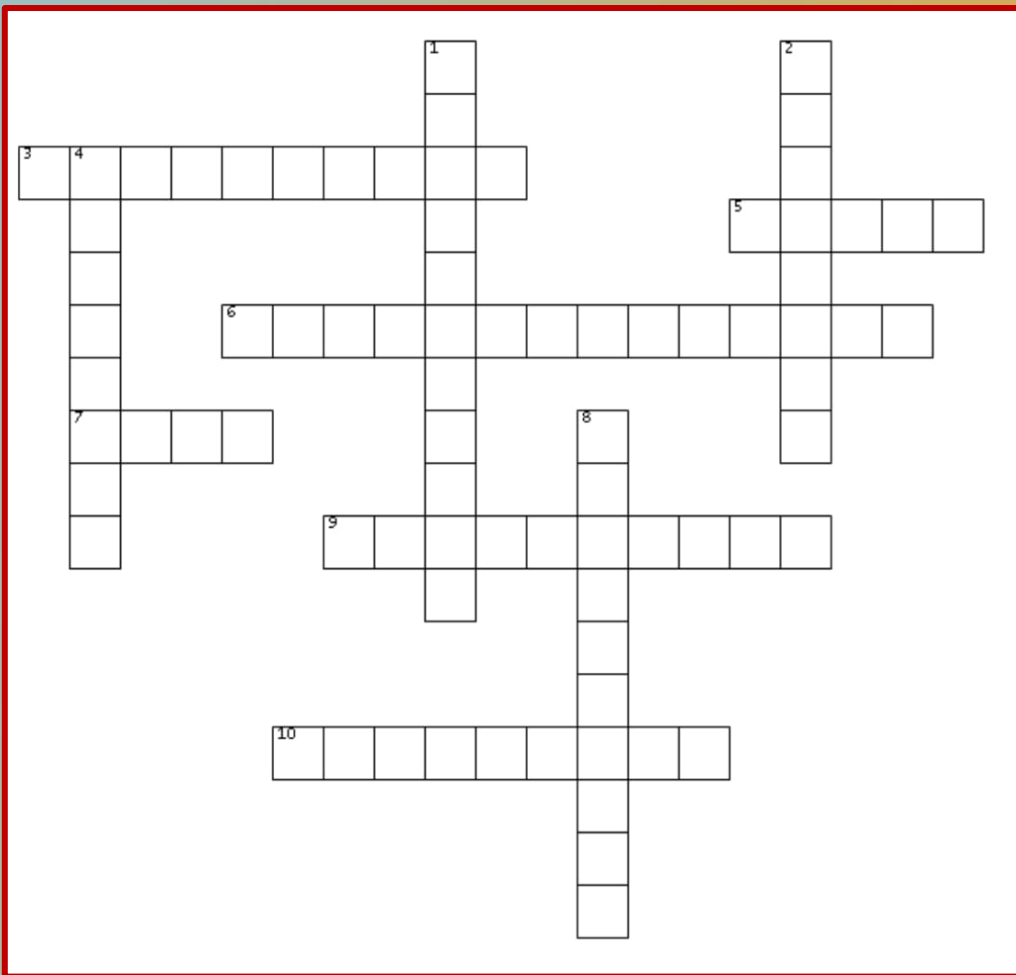


Agni College of Technology

Approved by AICTE / UGC, New Delhi, Accredited by NAAC & NBA, Affiliated to Anna University, Chennai.
ISO 9001:2015 Certified Institution: Estd.2001
OMR, Thalambur, Chennai - 600 130. Phone: 044 6740 9441 Mobile: 9445024081 www.act.edu.in



CROSSWORD PUZZLE



Electronics and Communication Engineering has proudly started the **puzzle-cracking** process to review and reinforce knowledge among students and faculties. This is an enjoyable form of entertainment that provides relaxation, brain stimulation, and social interaction between us.

BE AN ACTioneer, Aspire To BE the BEST



Agni College of Technology

Approved by AICTE / UGC, New Delhi, Accredited by NAAC & NBA, Affiliated to Anna University, Chennai.

ISO 9001:2015 Certified Institution: Estd.2001

OMR, Thalambur, Chennai - 600 130. Phone: 044 6740 9441 Mobile: 9445024081 www.act.edu.in



HINTS

LEFT TO RIGHT:

3. What is the distance between soundwaves that plays major role in physics?
5. In physics, the rate at which work is done is known as?
6. Branch that deals with heat and physical properties of matter is called?
7. Teachers collect _____ from students to know about them?
9. What is the other name used for scientific knowledge and purposes?
10. What is the basic concept that is used in coding to instruct for solving problem?

TOP TO BOTTOM:

1. Students most likely feel which subject is harder?
2. Branch that deals with computer science and operation of robots is called?
4. Name the most comfortable constant in chemistry for chemical students?
8. Geometrical represented image of an object obtain on a surface or plane is called?

Win the
Prize



The first three responses are announced as winners in the next-day newsletter. Send your answer to our contact number, 9500782806.

BE AN ACTIONeer, Aspire To BE the BEST



Agni College of Technology

Approved by AICTE / UGC, New Delhi, Accredited by NAAC & NBA, Affiliated to Anna University, Chennai.
ISO 9001:2015 Certified Institution: Estd.2001
OMR, Thalambur, Chennai - 600 130. Phone: 044 6740 9441 Mobile: 9445024081 www.act.edu.in

