

IGNITE 2022

A DAILY NEWSLETTER



Editor in chief

Dr. Srinivasan Alavandar
Principal, ACT

Editors

Ms. Mary Surya Kala, ASP - S&H
Ms. Vani Lavanya, AP - IT
Ms. Abirami Sekar, AP - CSE

BE AN ACTIONeer, Aspire To BE the BEST

Agni College of Technology

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

ISO 9001:2015 Certified Institution.Estd.2001.

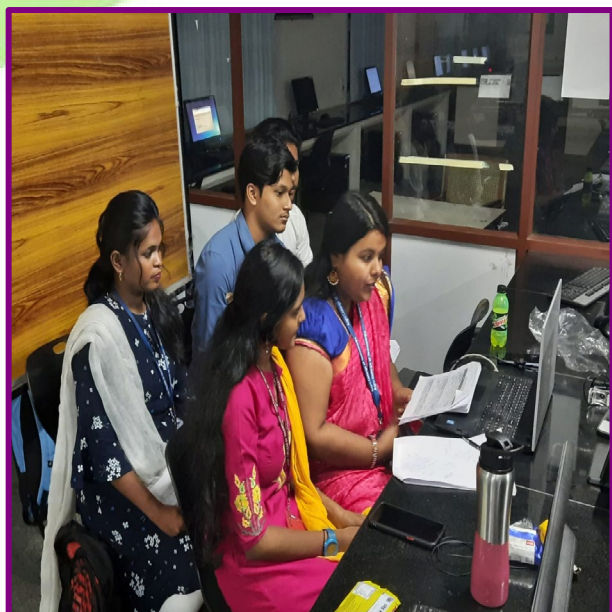


Website: www.act.edu.in

OMR, Thalambur, Chennai - 600 130. **Phone:** 044 6740 9444/45 **Mobile:** 8122124081,9445024081, **Email:** admission@act.edu.in



AGNIANS @ AICTE LILAVATI AWARD-2022



Two teams from the college have been shortlisted for the LILAVATI Award 2022 sponsored by AICTE. Both the teams have participated in the Live interaction with the Committee Members on 28th February 2022.

Team 1

Theme: **Women Innovator (Rural /Urban)**

Team Members: Dr. Ishwariya, Asso. Prof./CSE and Students from CSE & IT Departments

Team 2

Theme : **Women Defense**

Team Members: Dr. Geerthik. S, HoD/IT and Students from CSE & IT Departments.

BE AN ACTIONeer, Aspire To BE the BEST

Agni College of Technology

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

ISO 9001:2015 Certified Institution.Estd.2001.



Website:www.act.edu.in

OMR, Thalambur, Chennai - 600 130. Phone: 044 6740 9444/45 Mobile: 8122124081,9445024081, Email: admission@act.edu.in



PLACEMENT NEWS



Final year Students of B.E/B.Tech of CSE, IT, ECE & EEE departments have **Solutions Pvt Ltd** on 1st March 2022 . attended an off-campus assessment conducted by **Kanini Software**

BE AN ACTIONEER, ASPIRE TO BE THE BEST

Agni College of Technology

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

ISO 9001:2015 Certified Institution.Estd.2001.



Website:www.act.edu.in

OMR, Thalambur, Chennai - 600 130. **Phone:** 044 6740 9444/45 **Mobile:** 8122124081,9445024081, **Email:** admission@act.edu.in



FACULTY PARTICIPATION



Mr. Shankar, Assistant Professor, Department of Aerospace Engineering has successfully attended a FDP on **Effective Pedagogies in Teaching and Learning** organised by DACE, Chennai.

BE AN ACTIONeer, Aspire To BE the BEST

Agni College of Technology

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

ISO 9001:2015 Certified Institution. Estd. 2001.



Website: www.act.edu.in

OMR, Thalambur, Chennai - 600 130. Phone: 044 6740 9444/45 Mobile: 8122124081, 9445024081, Email: admission@act.edu.in



FACULTY PARTICIPATION



Dr. S. Sharmila, Professor and Head, Department of Chemical Engineering has participated in an ATAL FDP on the topic **Carbon Balance and Environmental Sustainability** conducted from 7th to 11th February 2022.

BE AN ACTIONEER, ASPIRE TO BE THE BEST

Agni College of Technology

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

ISO 9001:2015 Certified Institution. Estd. 2001.



Website: www.act.edu.in

OMR, Thalambur, Chennai - 600 130. Phone: 044 6740 9444/45 Mobile: 8122124081, 9445024081, Email: admission@act.edu.in



FACULTY PARTICIPATION



Dr. S. Sharmila, Professor and Head, Department of Chemical Engineering has participated in an ATAL FDP on **Recent Trends in Food Processing and Preservation Technologies** conducted from 1st to 5th February 2022.

BE AN ACTIONEER, ASPIRE TO BE THE BEST

Agni College of Technology

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

ISO 9001:2015 Certified Institution. Estd. 2001.



Website: www.act.edu.in

OMR, Thalambur, Chennai - 600 130. Phone: 044 6740 9444/45 Mobile: 8122124081, 9445024081, Email: admission@act.edu.in



OFFICE OF THE EXAMINATION CELL

Agni College of Technology
Thalambur, Chennai

Office of Examcell
Academic Calendar for AY 2021-2022 Even Semester- II, III and IV year

March'22				April'22				May'22				JUNE'22			
Date	Day	No. of Days		Date	Day	No. of Days		Date	Day	No. of Days		Date	Day	No. of Days	
1	Tue			22	1	Sun	May Day	43	2	Thu	Feedback from students	66	1		
2	Wed			23	2	Mon		44	3	Fri	Tentative Beginning of Model Exam for 2nd Yr, 3rd Yr & 4th Yr	67	2		
3	Thu			24	3	Tue	Ramzan	45	4	Sat	Thursday Timetable	68	3		
4	Fri			25	4	Wed		46	5	Sun	Holiday	69	4		
5	Sat			26	5	Thu		47	6	Mon		70	5		
6	Sun			27	6	Fri		48	7	Tue		71	6		
7	Mon			28	7	Sat	Tuesday Time Table	49	8	Wed		72	7		
8	Tue			29	8	Sun	Holiday	50	9	Thu		73	8		
9	Wed			30	9	Mon	Class committee meeting	51	10	Fri	Tentative Closing of Model Exam for 2nd Yr, 3rd Yr & 4th Yr	74	9		
10	Thu			31	10	Tue		52	11	Sat	Last Working Day for 2nd Yr, 3rd Yr & 4th Yr	75	10		
11	Fri				11	Wed		53	12	Sun	Holiday	76	11		
12	Sat				12	Thu		54	13	Mon	Beginning of Practical Exam for 2nd Yr, 3rd Yr & 4th Yr	77	12		
13	Sun				13	Fri		55	14	Tue		78	13		
14	Mon				14	Sat	Holiday	56	15	Wed		79	14		
15	Tue				15	Sun	Holiday	57	16	Thu		80	15		
16	Wed				16	Mon	Beginning of IAT 2 for 2nd Yr, 3rd Yr & 4th Yr	58	17	Fri		81	16		
17	Thu				17	Tue		59	18	Sat	Holiday	82	17		
18	Fri				18	Wed		60	19	Sun		83	18		
19	Sat				19	Thu		61	20	Mon		84	19		
20	Sun				20	Fri		62	21	Tue		85	20		
21	Mon				21	Sat	Wednesday Time Table (Closing of IAT-2 for 2nd Yr, 3rd Yr & 4th Yr)	63	22	Wed		86	21		
22	Tue				22	Sun	Holiday	64	23	Thu	Beginning of AU Theory Exam for 2nd Yr, 3rd Yr & 4th Yr	87	22		
23	Wed				23	Mon		65	24	Fri		88	23		
24	Thu				24	Tue		66	25	Sat	Holiday	89	24		
25	Fri				25	Wed		67	26	Sun		90	25		
26	Sat				26	Thu		68	27	Mon		91	26		
27	Sun				27	Fri		69	28	Tue		92	27		
28	Mon				28	Sat	Holiday	70	29	Wed		93	28		
29	Tue				29	Sun	Holiday	71	30	Thu		94	29		
30	Wed				30	Mon		72	31	Fri		95	30		
31	Thu				31	Tue		73				96	31		
No. of Working Days: 21				No. of Working Days: 21				No. of Working Days: 23				No. of Working Days: 24			
Cum. Working Days: 21				Cum. Working Days: 42				Cum. Working Days: 65				Cum. Working Days: 89			
No. of Saturdays leave: 2				No. of Saturdays leave: 3				No. of Saturdays leave: 2				No. of Saturdays leave: 2			
No. of Government Holidays: Nil				No. of Government Holidays: 2				No. of Government Holidays: 1				No. of Government Holidays: Nil			
Total No of Working Days : 75 For II, III and IV Years															

Principal
J. J. J.

Academic Calendar for the year 2021-2022 (Even Semester) has been scheduled with the working days for the II, III and IV year Students

BE AN ACTIONeer, Aspire To BE the BEST

Agni College of Technology

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

ISO 9001:2015 Certified Institution. Estd. 2001.



Website: www.act.edu.in

OMR, Thalambur, Chennai - 600 130. Phone: 044 6740 9444/45 Mobile: 8122124081, 9445024081, Email: admission@act.edu.in



FACULTY ACHEIVEMENT

Contents lists available at ScienceDirect

Materials Today: Proceedings

journal homepage: www.elsevier.com/locate/matpr

Mechanical properties of aluminium alloy AA7086 by equal channel angular press with parameters of die design

S. Rajkumar^{a,*}, T. Maridurai^b, Muthuraman Subbiah^c, M. Sivaraj^a, K. Mageshkumar^d, K. Arul^e, Ram Subbiah^f

^aDepartment of Mechanical Engineering, Faculty of Manufacturing, Institute of Technology, Hawassa University, Ethiopia
^bDepartment of Mechanical Engineering, Savertha School of Engineering, SIMATS, Chennai 602105, Tamil Nadu, India
^cDepartment of Engineering, University of Technology and Applied Sciences, Higher College of Technology, Muscat, Oman
^dSchool of Mechanical Engineering, Vellore Institute of Technology, Vellore 62014, Tamil Nadu, India
^eDepartment of Mechanical Engineering, Agni College of Technology, Thalambur, Chennai, India
^fDepartment of Mechanical Engineering, Cokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, Telangana 500090, India

ARTICLE INFO

Article history:
Available online xxxxx

Keywords:
Aluminium
Mechanical behaviour
AA7086
ECAP
Design Parameters

ABSTRACT

ECAP is a highly successful method for generating ultra-fine grained bulk material because of its equal channel angular pressure distribution. Using a custom-made die, the material is fed via a channel and into the next step. Die design features such as corner angle and channel angle have an impact on fine grain development. Commercial aluminium AA7086 was used as a sample material to assess mechanical behavior/properties before and after the ECAP procedure. This material had 90° and 20° channel angles when it was conceived and made in the lab. A die designed with an ideal parameter for use with an ECAP die, the mechanical behaviour of economically pure aluminium is investigated and analyzed in the current study. Here, the keystrokes were performed anywhere from 0 to 3 times, following the BC path. ECAP runs reduced particle size to 220 nm, and the strength increased to 368.4 MPa after three runs, the researchers found.

Copyright © 2021 Elsevier Ltd. All rights reserved.
 Selection and peer-review under responsibility of the scientific committee of the International Conference Virtual Conference on Technological Advancements in Mechanical Engineering.

1. Introduction

Lightweight and high-strength materials are the ultimate demand of any industry to meet immediate requirements in different fields, such as automobile, aerospace, defense, medical and other Engineering and Science applications. Grain refining of materials via extreme plastic deformation can be used to obtain this combination. The increased material qualities required for diverse applications through severe plastic deformation have developed a lot of interest in ultrafine and nanoparticle materials in recent years [1]. To increase mechanical characteristics, a variety of procedures can be used to refine grain size after it has undergone severe plastic deformation. According to the well-known Hall-Petch relationship, one means of improving mechanical qualities of specific power is grain refinement [2]. Equation (1) demonstrates the relationship between yield stress (σ_y) and grain size.

$$\sigma_y = \sigma_0 + k d^{-1/2} \quad (1)$$

Equation (1) includes friction stress (σ_0) and yield stress (k). This relationship, which minimizes the material's grain structure, is also known as grain-boundary reinforcement or strengthening [3]. SPD techniques, which apply severe shear strain to the material in the main deformation zone, can reduce the average grain size. ECAP, Multiaxial Forging, Pressurized Torsion, Consolidated Roll Adhesion, Continuous Pultrusion and Compress, and Repetition and Stretching are examples of such methods. ECAP, Multiaxial Forging, Pressurized Torsion, Consolidated Roll Adhesion, Continuous Pultrusion and Compress, and Repetition and Stretching are examples of such methods [4,5]. Corrugations are some of the SPD methods that can be used. All the SPD processes are different, but their main purpose is to reduce the size of the grains and bring changes in the mechanical and other properties [6]. After comparing the various SPD methods for grain refinement and microstructure evolution, it was determined that ECAP is the most effective and efficient way for meeting industrial needs [7]. When using the ECAP, a billet

* Corresponding author.
 E-mail address: ccetraj@gmail.com (S. Rajkumar).

<https://doi.org/10.1016/j.matpr.2022.02.002>
 2214-7853/Copyright © 2021 Elsevier Ltd. All rights reserved.
 Selection and peer-review under responsibility of the scientific committee of the International Conference Virtual Conference on Technological Advancements in Mechanical Engineering.

Please cite this article as: S. Rajkumar, T. Maridurai, M. Subbiah et al., Mechanical properties of aluminium alloy AA7086 by equal channel angular press with parameters of die design, Materials Today: Proceedings, <https://doi.org/10.1016/j.matpr.2022.02.002>

Dr. Arul. K, ASP, Department of Mechanical Engineering has published a research article on **Mechanical Properties of Aluminium Alloy AA7086 by Equal Channel Angular Press with Parameters of Die Design** in Elsevier publications.

BE AN ACTIONeer, Aspire To BE the BEST

Agni College of Technology

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

ISO 9001:2015 Certified Institution.Estd.2001.



Website: www.act.edu.in

OMR, Thalambur, Chennai - 600 130. **Phone:** 044 6740 9444/45 **Mobile:** 8122124081,9445024081, **Email:** admission@act.edu.in



OFFICE OF THE EXAMINATION CELL

Branch Name		B.E. Civil Engineering		Exam Date	Session
mes	Subject Code	Subject Name			
01	CY3151	Engineering Chemistry		21-MAR-22	F.N.
01	HS3151	Professional English - I		24-MAR-22	F.N.
01	MA3151	Matrices and Calculus		26-MAR-22	F.N.
01	GE3151	Problem Solving and Python Programming		28-MAR-22	F.N.
01	PH3151	Engineering Physics		30-MAR-22	F.N.
Branch Name		B.E. Computer Science and Engineering		Exam Date	Session
mes	Subject Code	Subject Name			
01	CY3151	Engineering Chemistry		21-MAR-22	F.N.
01	HS3151	Professional English - I		24-MAR-22	F.N.
01	MA3151	Matrices and Calculus		26-MAR-22	F.N.
01	GE3151	Problem Solving and Python Programming		28-MAR-22	F.N.
01	PH3151	Engineering Physics		30-MAR-22	F.N.
Branch Name		B.E. Electrical and Electronics Engineering		Exam Date	Session
mes	Subject Code	Subject Name			
01	CY3151	Engineering Chemistry		21-MAR-22	F.N.
01	HS3151	Professional English - I		24-MAR-22	F.N.
01	MA3151	Matrices and Calculus		26-MAR-22	F.N.
01	GE3151	Problem Solving and Python Programming		28-MAR-22	F.N.
01	PH3151	Engineering Physics		30-MAR-22	F.N.

Anna university had sent a notification to all the affiliated colleges regarding UG theory Examination Time Table for the I year first semester students.

BE AN ACTIONeer, Aspire To BE the BEST

Agni College of Technology

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

ISO 9001:2015 Certified Institution.Estd.2001.



Website:www.act.edu.in

OMR, Thalambur, Chennai - 600 130. Phone: 044 6740 9444/45 Mobile: 8122124081,9445024081, Email: admission@act.edu.in



INDUSTRY INSTITUTE CONNECT



Ms.Archana, Placement Executive had visited **MGM Healthcare** located at Aminjikarai, Chennai on 1st March 2022 and discussed with Ms. Bhavana, Vice President and HR regarding the Internship (3-6months), Inplant training for 2022 batch student. She also discussed about the placement collaboration for BE & ME - BME, BE – IT & CSE passed out Engineering students.

BE AN ACTIONeer, Aspire To BE the BEST

Agni College of Technology

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

ISO 9001:2015 Certified Institution.Estd.2001.



Website:www.act.edu.in

OMR, Thalambur, Chennai - 600 130. Phone: 044 6740 9444/45 Mobile: 8122124081,9445024081, Email: admission@act.edu.in



PLACEMENT DRIVE

BE AN ACTIONEER, Aspire To BE the BEST

Agni College of Technology   

Approved by AICTE / UGC, New Delhi, Accredited by 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

COUNSELLING CODE **1316**



PLACEMENT DRIVE

 **BASE AUTOMATION**

2
MARCH
2022

On campus Placement Drive is conducted by **BASE AUTOMATION**, Chennai on 2nd March 2022 for the final year CSE & IT Department Students.

BE AN ACTIONEER, Aspire To BE the BEST

Agni College of Technology   

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

ISO 9001:2015 Certified Institution. Estd. 2001.



Website: www.act.edu.in

OMR, Thalambur, Chennai - 600 130. Phone: 044 6740 9444/45 Mobile: 8122124081, 9445024081, Email: admission@act.edu.in



PLACEMENT



Placement Executive _ Ms.Archana visited Star Health Insurance located at Royapettah , Chennai on Tuesday, March 1,2022 and discussed with Mr.Hari in Human Resource Department regarding Internship (3-6months) & Placements collaboration for BE /ME IT & CSE and all other Engineering 2022 batch students for Voice Process / Management Trainee position.

BE AN ACTIONeer, Aspire To BE the BEST

Agni College of Technology

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

ISO 9001:2015 Certified Institution.Estd.2001.



Website:www.act.edu.in



OMR, Thalambur, Chennai - 600 130. **Phone:** 044 6740 9444/45 **Mobile:** 8122124081,9445024081, **Email:** admission@act.edu.in