

You Choose, We Do It

St. JOSEPH'S COLLEGE OF ENGINEERING

(An Autonomous Institution)

St. Joseph's Group of Institutions Jeppiaar Educational Trust

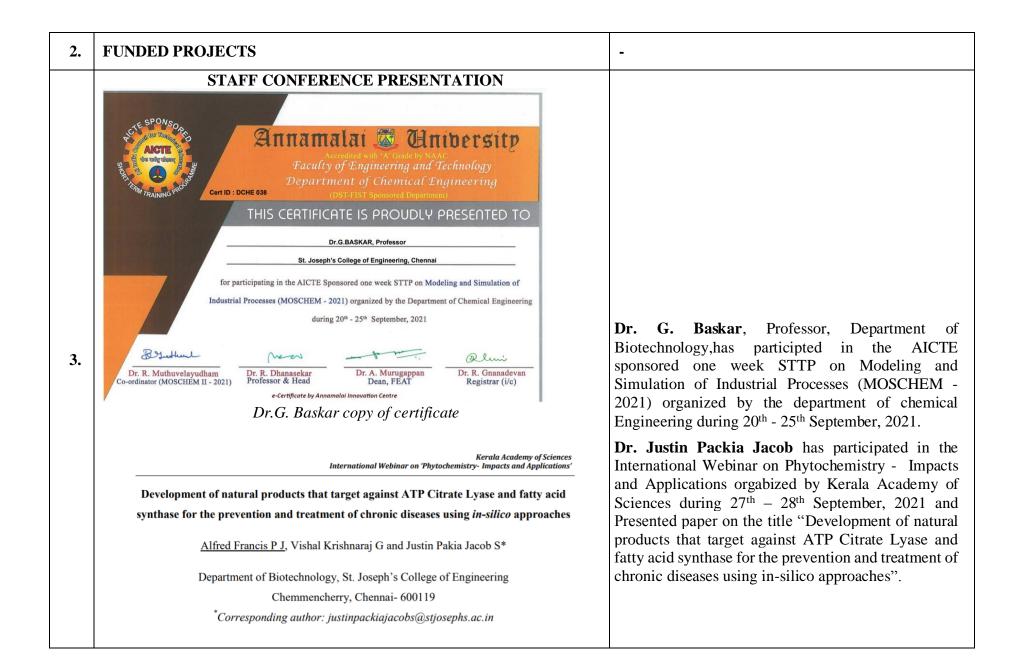
OMR, Chennai - 119.



SEPTEMBER 2021

DEPARTMENT OF BIOTECHNOLOGY

S.No.	Title of the Events and Photographs	Details of the Event
1.	PUBLICATIONS(ONLY PUBLISHED) DETAILS Polymer Bulletin https://doi.org/10.1007/s00289-021-03901-9 REVIEW PAPER Nanochitosan augmented with essential oils and extracts as an edible antimicrobial coating for the shelf life extension of fresh produce: a review C. Karthik¹ · D. G. Caroline¹ ○ · S. Pandi Prabha² Received: 23 June 2021 / Revised: 21 August 2021 / Accepted: 19 September 2021 © The Author(s), under exclusive licence to Springer-Verlag GmbH Germany, part of Springer Nature 2021 Copy of Journal Publication	• Karthik C, Caroline D G, Pandi Prabha S had published paper on Nanochitosan augmented with essential oils and extracts as an edible antimicrobial coating for the shelf life externsion of fresh produce: a review in the Journal Polimer Bulletin, September 2021. (IF - 2.870)



DEPARTMENT OF CIVIL ENGINEERING

Sl. No.	Details of the Events	Remarks
1.	Activities by the Staffs	Ms. Adlin Rose has registered for courses in NITTT-MODULE 3, 4, 5 and 6 in the month of September and Exams will be held on October 24 and 30th. Ms. P.Padmapriya is undergoing courses in NITTT-MODULE 3, 4, 5 and 6 in the months of September and October 2021. Mr. S.ThangaPerumal is undergoing courses in NITTT-MODULE 3, 4, 5 and 6 in the months of September and October 2021. Ms. R.Ruthra is undergoing 3 months IIRS-ISRO Online Course on "BASIC OF RS, GIS & GNSS" from August 16th to Nov 26th

DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING

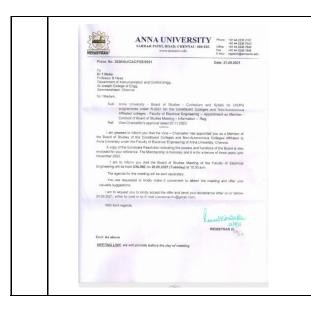
Sl. No.	Title]	Detail						
1	Webinar/ FDP Attended By Faculty	S.No	Faculty Name	Date		Webinar /FDP attende workshop	ed/	Conducting agency	No. of days
		1.	Dr.V.Rajinikanth	05.09.2021 to 09.09.2021		ATAL FDP (Resource Person)		Katihar Engineering College Katihar, Bihar	2
		2.	Mrs. R. Angel Sujitha	30.08.2021 to 05.09.2021		FDP on software tools		Bannari Amman Institute of Technology	7
2	Publications	S.No	Faculty	Title of the pa	aper		Date	Journal/Patent/Book Chapter/Conference	
		1.	Dr. V. Rajinikanth				SEP 2021	IEEE Conference	
		2.	Dr. V. Rajinikanth	Deep-Learning bas Pneumonia in Ches			SEP 2021	IEEE Conference	
		3.	Dr. V. Rajinikanth		11 &		SEP 2021	IEEE Conference	
		4.	Dr. S.Meena			SEP 2021	Springer Conference		

		-	5. Dr. N. Sri Madhava Raja,	System of a 20		ection Coordination Panel 5 of Student houd, Oman	SEP 2021	IEEE Conf	erence	
		(6. Dr. N.Sri Madhava Raja	Solar powered			SEP 2021	IEEE Conf	erence	
			7. Mrs. M.Nivethitha Devi	spherical Inter Conference or	racting System	aFA and PSO for a ". International I Mobile Sustainable	SEP 2021	Springer Co	onference	
	8. Dr. N.Sri Madhava Artificial Vision Based Smart Urb Raja System		t Urban Parking	SEP 2021	IEEE Conf	erence				
			9.Dr. N.Sri Madhava Raja	Healthcare Framework for Risk Analysis of Hypertension			SEP 2021	IEEE Conf	Conference	
		-	1(Dr.C.Pandeeswaran			ler the title " nectors for Advanced	SEP 2021	APPLICAT REGISTRA PATENT	TION FOR ATION OF DESI	GNS
3.	Event Conducted	S.No	Faculty Name		Date	Event Title			Type of Event	No. of Days
]	Mrs. M. Nivethitha Dev Mrs.C.RamadeviMs. Ki Godweena A		1.09.2021	Who am I?			School Event	1
			Mr.N.Hariprasad Mrs.M.Angelin Ponrani		4/9/21	Instagram-story co	entest 2.0		School Event	1
			Mrs.M.Nivethitha Devi Mrs.M.Angelin Ponrani		7/9/21	Instagram Story Co	ontest		School Event	1
			DR,N.SRI MADHAVA MRS.C.RAMADEVI	RAJA	20/9/21	ESSAY WRITING EMPOWERMENT		N	SCHOOL EVENT	1

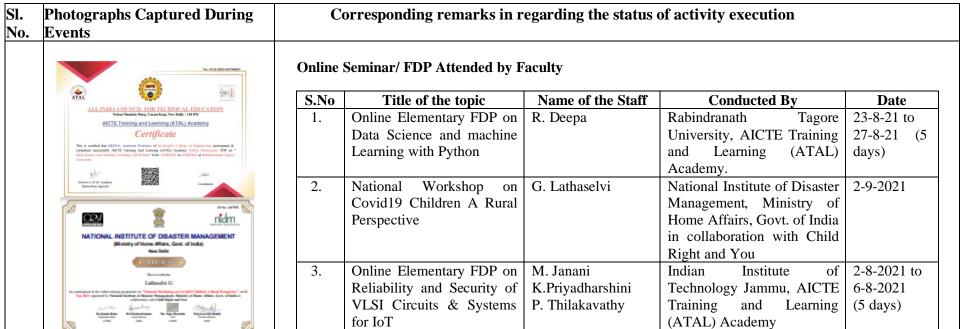
5.Mrs. M. Nivethitha Devi Dr.N.Sri Madhava Raja	21.9.2021	ART COMPETITION	SCHOOL EVENT	1
6.Dr.C.Gnanaprakasam Mrs.J.Gnanasoundharam Ms. Kirthini Godweena A	22.09.2021	QUIZ	School Event	1
7.Dr.C.Gnanaprakasam Mrs.J.Gnanasoundharam Ms. Kirthini Godweena A	23.09.2021	Essay writing	School Event	1
8.Mr.R.Elavarasan Mrs.M.Angelin Ponrani	27/09/21	Quiz	School Event	1
9.Mrs.M.Angelin Ponrani	28/09/21	Pencil Art Competition	School Event	1
1(Dr. Senthil Kumar B Ms. Kirthini Godweena A Mr.N.Hariprasad	29.09.2021	QUIZ	School Event	1
1 Dr.V.Vijayan Ms. Kirthini Godweena A	30.09.2021	Know your Scientists (Online quiz)	School Event	1
12Mr.D.SANKARAN	30-09-2021	Covid-19 Awareness - Quotes & Poster	School Event	1

DEPARTMENT OF INSTRUMENTATION AND CONTROLS ENGINEERING

Sl. No.	Details of the Events	Remarks
1	TATAL ALL INDIA COUNCIL FOR TECHNICAL EDUCATION Notion Mandels Mary, Vasuat Kanj, New Bellii - 110 070 AICTE Training and Learning (ATAL) Academy Certificate This is certified that Abinula T, Assistant Professor of all pusples callege of engineering participated & completed successfully ACRI Training and Learning (ATAL) Academy Certificate This is certified that Abinula T, Assistant Professor of all pusples callege of engineering participated & completed successfully ACRI Training And Learning (ATAL) Academy Online Elementary FDP on "Instrumentation, Signals and Images for the Evaluation of Physiological Systems" from 16/08/2021 to 2008/2021 at National Institute of Technology Tirechbrappalli. Adviser, ATAL Academy Manta Ran Agreed Toolinater Academy Coordinater	Date: 16 August, 2021 to 20 August, 2021 TOPIC: Instrumentation Signals and Images for the Evaluation of Physiological Systems Organizer: National Institute of Technology, Tiruchirappalli No. of Participant: 01
2	Other Activities	Date: 28 September,2021 TOPIC: Board of Studies member/ Faculty of Electrical Engineering Organizer: Anna University Objectives: Consider and approve R2021 for Non autonomous affiliated Colleges under Anna University. No. of Participant:01



DEPARTMENT OF INFORMATION TECHNOLOGY





International Journal of Intelligent Engineering & Systems

Intelligent Traffic Management Support System Unfolding the Machine Vision Technology Deployed using YOLO D-NET

Divya Jegatheesan¹* Chandrasekar Arumuga

*Department of Information Technology, St. Joseph's College of Engineering, Chennat, India
*Department of Computer Science and Engineering, St. Joseph's College of Engineering, Chennat, India

*Corresponding author's Email: divisi, profiggmail.com

Abstract The strilligent trapport system sizes to control congention and rehance the driving experience through wavely of bedromlogen and communication system. They provide no the offent which can be for a meadure for monthly of the control of

Keywords: Deep learning, YOLO, Dilated CNN, SSD Inception, RCNN, RESNET

J. Divya published a Scopus Indexed Journal

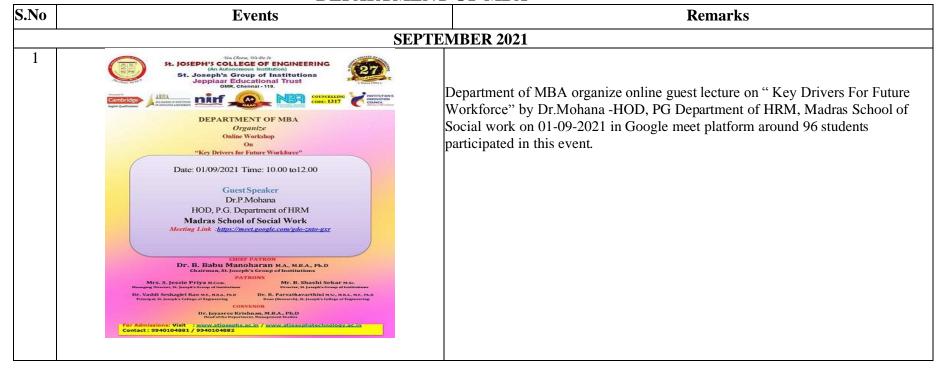
J. Divya, A. Chandrasekar, "Intelligent Traffic Management Support System Unfolding the Machine Vision Technology Deployed using YOLO D-NET", International Journal of Intelligent Engineering and Systems, Vol.14, No.5, DOI: 10.22266/ijies2021.1031.03, Publisher: Intelligent Systems and Network Security, ISSN: 2185-3118, Sep 2021. (**Scopus Indexed Journal**)

Abstract: The intelligent transport system aims to control congestion and enhance the driving experience through a variety of technologies and communication systems. They provide us a lot of data which can be fed to machine learning technologies to provide further enhanced services to the common public as well as the transport officials. In this busy modern world, the usage of vehicles is highly increased and thus monitoring and detecting these vehicles onboard with better accuracy and less time cost is quite a challenging task. We propose an intelligent traffic management solution to detect vehicles (static and onboard) which finds its set-about in the field of machine vision technology called YOLO D-NET (You Only Look Once Dilated Net). YOLO D-NET puts forward a novel architecture which incorporates the implementation of traditional YOLO model alongside of dilated Convolution Neural Network (CNN). Our paper also focuses on making a constructive comparison between the four different models namely SSD (Single Shot Multibox Detector) Inception, Faster R-CNN (Region-based CNN), YOLO ResNet (Residual Neural Network) and the proposed model YOLO D-NET. We have used the predefined COCO (Common Objects in Context) dataset and the custom dataset to train the traditional models. Also YOLO D-NET makes use of the predefined YOLO weights followed by the dilated CNN layers. Our proposed model was found to be 97.5 percent accurate with enhanced precision and accuracy than the other models particularly with less training time than the traditional YOLO model.

DEPARTMENT OF MATHEMATICS AND ENGLISH

S. No	Name of the Staff	Topic Name	Date	Organized by
1	Dr.U.	Challenges and Prospects of Teaching English Language, Literature, Linguistics and Culture -IV	19-09-2021	WELLTTA (World English Language
1	Venkakteswara	Challenges and Prospects of Teaching English Language, Literature, Linguistics and Culture - V	26-09-2021	Learners Teachers Trainers Association)

DEPARTMENT OF MBA



DEPARTMENT OF MECHANICAL ENGINEERING

Sl	Name of the Activity	Remarks
No 1	Sri Sivasubramaniya Nadar (SSN) College of Engineering (An Autonomous Institution, Affiliated to Anna University, Chennai) (RAJIV GANDHI SALAI (OMR), KALAVAKKAM, CHENNAI – 603 110, TAMILNADU Department of Mechanical Engineering Certificate of Participation This is to certify that G. Kasirajan, Assistant Professor of St Joseph's College of Engineering, Chennai has participated in the National Workshop (Online) on "Modern Trends in Manufacturing Engineering" organized by the Department of Mechanical Engineering, SSN College of Engineering, Chennai on 30-9-2021. W. Danakon Dr. K. Jayakumar Dr. D. Ananthapalmanaban Dr. K. Jayakumar Conveners Conveners	> Mr.G.Kasirajan Participated in National Workshop (online) on "Modern Trends in Manufacturing Engineering" organized by Department of Mechanical Engineering, SSN College of Engineering, Chennai on 30-09-2021
2	NPTEL-AICTE Faculty Development Programme Funct by the Wavey of HEU, Cond of India) This certificate is swarded to MARUN for successfully completing the course Advances in Welding and Joining Technologies with a consolidated score of 70 % Pril. Andrew Thangarai In Title Countries Pril. Print Countries (Jul Sep 2021) Pril. Andrew Thangarai In Title Countries A that Countries A that Cou	➤ Mr.M.Arun Successfully completed the course on Advances in Welding and Joining Technologies with a Consolidated Score of 70%.



➤ Mr.M.Arun Successfully completed the course on Fundamental of Welding Scienceand Technology with a Consolidated Score of 76%.

DEPARTMENT OF SCIENCE

Sl.	Events	Remarks
No		
1	Collabarative Quality	-
	initiatives with other institutions	
2.	Industrial Visits,Inplant	_
	Training,Internships	
3	Guest Lecture	-
4	FDP/Workshop/Conference	Lecture delivered:
		1. Dr. K. Jayamoorthy delivered an invited talk in the National FDP on "Research methodology tools
		and techniques" conducted by "K.S.R Womens College, Thiruchengode" on 24.09.21.
		2. Dr. K. Jayamoorthy delivered an invited talk in the National webinar on "Chemistry of Materials"
		conducted by "St. Joseph University, Nagaland" on 30.09.21.
		ATAL-AICTE FDP
		1. Dr. S.M. Prakash, Dr. B. Subash, Ms. S. Savitha, Dr. V. Swarnalatha, Ms. J. sharmila attended ATAL-
		AICTE FDP on "Wastewater Treatment Recycle and Reuse" conducted by Netaji Subhas University of
		Technology, West Campus, Dwarka from 06.09.21 to 10.09.21
		2. Dr. K. Sathesh Kumar attended ATAL- AICTE FDP on "Computational Methods in Chemical
		Engineering" conducted by National Institute of Technology, Hamirpur from 06.09.21 to 10.09.21
		3. Dr. G. Murugan attended ATAL- AICTE FDP on "Stress Management" conducted by VNR Vignana
		Jyothi Institute of Engineering and Technology, Hyderabad, from 13.09.21 to 17.09.21
		4. Ms. A. Arulmozhi, Dr. S. Rama attended ATAL- AICTE FDP on "Nanoscience for Nano materials"
		conducted by "Manakula Vinayagar Institute of Technology, Pondichery" from 20.09.21 to 24.09.21
		5. Mr. S. Kaleel Mohamed Ibrahim attended ATAL- AICTE FDP on "Magnetic Levitation" conducted
		by "Hindusthan Institute of Technology, Coimbatore" from 20.09.21 to 24.09.21
		6. Dr. V.N. Nandini Devi, Dr. S. Suresh, Dr. N.R. Rajagopalan attended online workshop on "How to
		conduct Student Induction program (SIP)" conducted by AICTE on 20.9.21.
		conduct student made from program (Sir) conducted by ATCTE on 20.7.21.

Participated:

- 1. Dr. G. Murugan, Dr. V. Swarnalatha, Ms. J. Sharmila, Dr. N.R. Rajagopalan, Dr. S.M. Prakash, Dr. B. Subash, Dr. K. Jayamoorthy, Ms. S. Savitha, Dr. A. Uma Devi attended National online Faculty Development Program on "Advances in Analytical Techniques" conducted by "SRM Institute of Science & Tech, Chennai" from 30.08.21 to 06.09.21.
- 2. Dr. S. Kiruba, Dr. N. Punitha, Dr. K. Sathesh Kumar, Ms. A. Arulmozhi, Ms. A. Mahalakshmi, Mr. S. Kaleel Mohamed Ibrahim, Dr. P. Krishnan, Dr. S. Rama, Dr. G. Murugan, Dr. V. Swarnalatha, Ms. J. Sharmila, Dr. N.R. Rajagopalan, Dr. S.M. Prakash,
- Dr. B. Subash, Dr. K. Jayamoorthy, Ms. S. Savitha, Dr. A. Uma Devi attended National online Faculty Development Program on "Advanced Materials for Future Science" conducted by "Jeppiaar Engineering college, Chennai" from 06.09.21 to 13.09.21.
- 3. Dr. P. Krishnan attended National Webinar on "Facets of Materials Science' conducted by Karpagam Academy of Higher Education, Coimbatore on 08.09.21
- 4. Dr. S. Suresh attended National Webinar on "Metal Organic Chemical Vapor Deposition (MOCVD) growth of III-Nitrides" conducted by "Saveetha School of Engineering, Chennai" on 09.09.21
- 5. Dr. S. Kiruba, Dr. N. Punitha, Ms. A. Arulmozhi, Ms. A. Mahalakshmi, Mr. S. Kaleel Mohamed Ibrahim, Dr. P. Krishnan, Dr. S. Rama, Dr. G. Murugan, Dr. V. Swarnalatha, Ms. J. Sharmila, Dr. N.R. Rajagopalan, Dr. S.M. Prakash, Dr. B. Subash, Dr. K. Jayamoorthy, Ms. S. Savitha, Dr. A. Uma Devi attended National webinar series on "Excellence of Women in the field of Science & Technology" conducted by "Sathyabama Inst. of Science & Technology, Chennai" from 13.09.21 to 23.09.21.
- 6. Dr. S. Kiruba, Dr. N. Punitha, Dr. P. Krishnan, Dr. S. Rama, attended International online Faculty Development Program on "Advanced Computational and Experimental Research in Physics" conducted by "SRM Institute of Science & Tech, Chennai" from 13.09.21 to 25.09.21.
- 7. Mr. S. Kaleel Mohamed Ibrahim attended National webinar on "Facile synthesis of multi-functional thiazole-schiff base derivatives via multicomponent reaction and their anti-cancer evaluation and molecular docking studies" conducted by "Arka Jain University, Jharkhand" on 14.09.21
- 8. Dr. S. Kiruba, attended International online Faculty Development Program on "Semiconductor device, Microwave and Renewable Energy (SDMRE-2021)" conducted by "Asansol Engineering College,

		Asansol, West Bengal" from 21.09.21 to 25.09.21.
		9. Dr. G. Murugan, Dr. V. Swarnalatha, Ms. J. Sharmila, Ms. S. Savitha attended National online Faculty
		Development Program on "Instrumentation Techniques and Advanced Materials" conducted by "Ayya
		Nadar Janaki Ammal College, Sivakasi" from 21.09.21 to 25.09.21.
		10. Dr. S. Kiruba, Mr. S. Kaleel Mohamed Ibrahim, Dr. K. Sathesh Kumar, Dr. P. Krishnan, Dr. S.M.
		Prakash, Dr. B. Subash attended e-workshop on "Phase Identification of Polycrystalline Materials using
		XRD data in Softwares" conducted by "Dr. N.G.P. Arts&Science College, Kalapatti Road, Coimbatore"
		on to 25.09.21.
		11. Mr. S. Kaleel Mohamed Ibrahim attended National webinar on "Applications and Perspectives of
		Chalcogenide Glasses in Electronics and Optoelectronics" conducted by "Harcourt Butler Technical
		University, Kanpur (UP)," on 28.09.21
		12. Dr. G. Murugan, Dr. N. Punitha, Mr. S. Kaleel Mohamed Ibrahim, Ms. J. Sharmila, Dr. N.R.
		Rajagopalan, Dr. K. Sathesh Kumar, Dr. S. Manikandan, Dr. S.M. Prakash, Dr. B. Subash, Dr. P.
		Saravanan, , Ms. S. Savitha, Dr. A. Uma Devi attended National webinar on "Chemistry of Materials"
		conducted by "St. Joseph University, Nagaland" on 30.09.21.
5	Symposium	-
6	STTP	-
7	Value added	-
	Courses/Courses other than VAC	
8	Competitions attended by	_
	students	
	Awards/Prize won by students	-
	Industrial Projects done by	_
	students	
11	Publications(only published) details	1. Dr. S, Rama Published a paper titled "Nucleation kinetics, Williamson-Hall analysis, hardness and
	uctaris	dielectric properties of pyridine-2-carboxylictrichloroacetate single crystals" in Physica B: Physics of
		Condensed Matter, Vol. 624.
		2. K. Jayamoorthy, P. Saravanan, N. R. Rajagopalan, published a paper titled "Carbon nanotubes
		functionalized with newly synthesized benzimidazole derivative for corrosion inhibition on the nickel
		alloy surface in a sulfuric acidic medium" in "Inorganic and Nano-Metal Chemistry" DOI:

		10.1080/24701556.2021.1984534			
12	Funded Projects	-			
13	Other activities(if any)	Department of Science conducted the following online events for school students:			
		1) Flashes – 4.9.21 to 6.9.21			
		2) Verses - 5.9.21 to 7.9.21			
		3) Colourplay – 6.9.21 to 8.9.21			
		4) Candid portraits – 8.9.21			
		5) Futoshiki fiesta – 9.9.21			
		6) Smartinis India – 15.9.21			
		7) Wild mesh – 16.9.21			
		8) 3D illustrations – 17.9.21			
		9) Cipher – 21.9.21			
		10) Crafty clever – 25.9.21			
		11) Catechize – 29.9.21			
		12) Bharathi kanda Tamizh – 30.9.21			