



Avinashilingam Institute for Home Science and Higher Education for Women

(Deemed to be University Estd. u/s 3 of UGC Act 1956, Category 'A' by MHRD)

Re-accredited with A++ Grade by NAAC. CGPA 3.65/4, Category I by UGC

Coimbatore - 641 043, Tamil Nadu, India



Research and Development Cell



Workshop for Research Scholars

Zeta Potential and Particle size analysis

Date & Time : 21-6.2022

1.45pm - 4.30pm

Venue : Gallery Block

Programme Schedule

21 JUNE
1.45 PM

WORKSHOP ON
Zeta potential and Particle Size Analysis
organized by
Research & Development cell

Avinashilingam Institute for Homescience
and Higher Education for
Women, Coimbatore-641043

✓ **WHO CAN PARTICIPATE?**
PG, RESEARCH SCHOLARS, FACULTY
INTERESTED IN MATERIAL
CHARACTERIZATIONA
FEE: RS.50
VENUE: GALLERY

RESOURCE PERSON
Dr.Aruna Dhathathreyan,
Research Mentor Cum
Consultant
Avinashilingam Institute
for Home Science and
Higher Education for
Women, Coimbatore
& Emeritus Scientist
CLRI, Chennai

REGISTER
<https://tinyurl.com/yk6p3pr3>

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Coimbatore - 641 043, Tamil Nadu, India

Workshop on Zeta potential and particle size analysis

21.6.2022

Venue: Gallery

Time	Programme
1.45pm-1.50pm	Prayer Song
1.50pm-2.00pm	Welcome by Dr. P. Lalitha Director i/c R & D
2.20pm-4.00pm	Resource talk on "Zeta potential and particle size analysis" Dr. Aruna Dhathathreyan, Research Mentor Cum Consultant Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore & Emeritus Scientist CLRI, Chennai
4.00pm-4.25pm	Interaction
4.25pm-4.30pm	Vote of Thanks by any one participant
Registration	https://tinyurl.com/yk6p3pr3

All are cordially invited



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by UGC Under Section 12 B Coimbatore-641 043, Tamil Nadu, India

**GUIDELINES/PROFORMA FOR ORGANISING CONFERENCES, WORKSHOPS, SEMINARS, WEBINARS
OR OTHER EVENTS**

Name of the applicant Department:

1. Activity : Workshop
2. Geographical Coverage : University Level
3. Name of the Event : Workshop on Zeta potential and particle size analysis
4. Date(s) : 21.6.2022 Afternoon
5. Venue : Academic Council Hall
6. Name & Designation of Convenor/Organizing Secretary and Team

Dr.P.Lalitha Director i/c R&D

7. Financial Assistance Required : Yes (If yes , enclose tentative budget)
8. Details of assistance sought from other sources: (Govt/Private) NA
9. Details of collaborating institution, if any
10. Detailed Proposal of the Activity

- A. Aims/Objectives : To train our scholars on material characterization techniques
- B. Target audience/participants with expected number: 40
- C. Details of Sessions: 2 hours resource lecture on "Zeta potential and particle size analysis"
- D. Please mention themes/topics to be covered under each Technical Session and names of National and International Resource Persons:
- E. Expected outcome: Scholars doing research in material characterization may acquire skills in particle size analysis which may be useful in bringing out good research designs and publications

11. In case of International Conference and collaboration, kindly give resources for International travel and a letter from the concerned head of collaborating body. Attach GoIclearance in case of International events- NA

12. Registration fee : Rs. 50/

P.Lalitha
Director R&D

Date: 16/6/2022

H. S. Srinivasan
Finance Officer

16/6/22

S. Hanumanth
Registrar

16/6/22

A. Manojkumar
Vice Chancellor

Recd
16/6/22
VC/16/22
16/6/22



Tentative Budget

Workshop on Zeta potential and particle size analysis
21.6.2022

S.No	Item	Tentative Amount (Rs)
1	Refreshments	1400
2	Colour print and report	200
3	Total	1600

P. L. K.
16/6/2022

Expected number of participants : 40

Registration Fee: Rs. 50/person

H. M. J.
16/6/22

P. L.
16/06/2022

S. K.
16/6/22

Objective of workshop

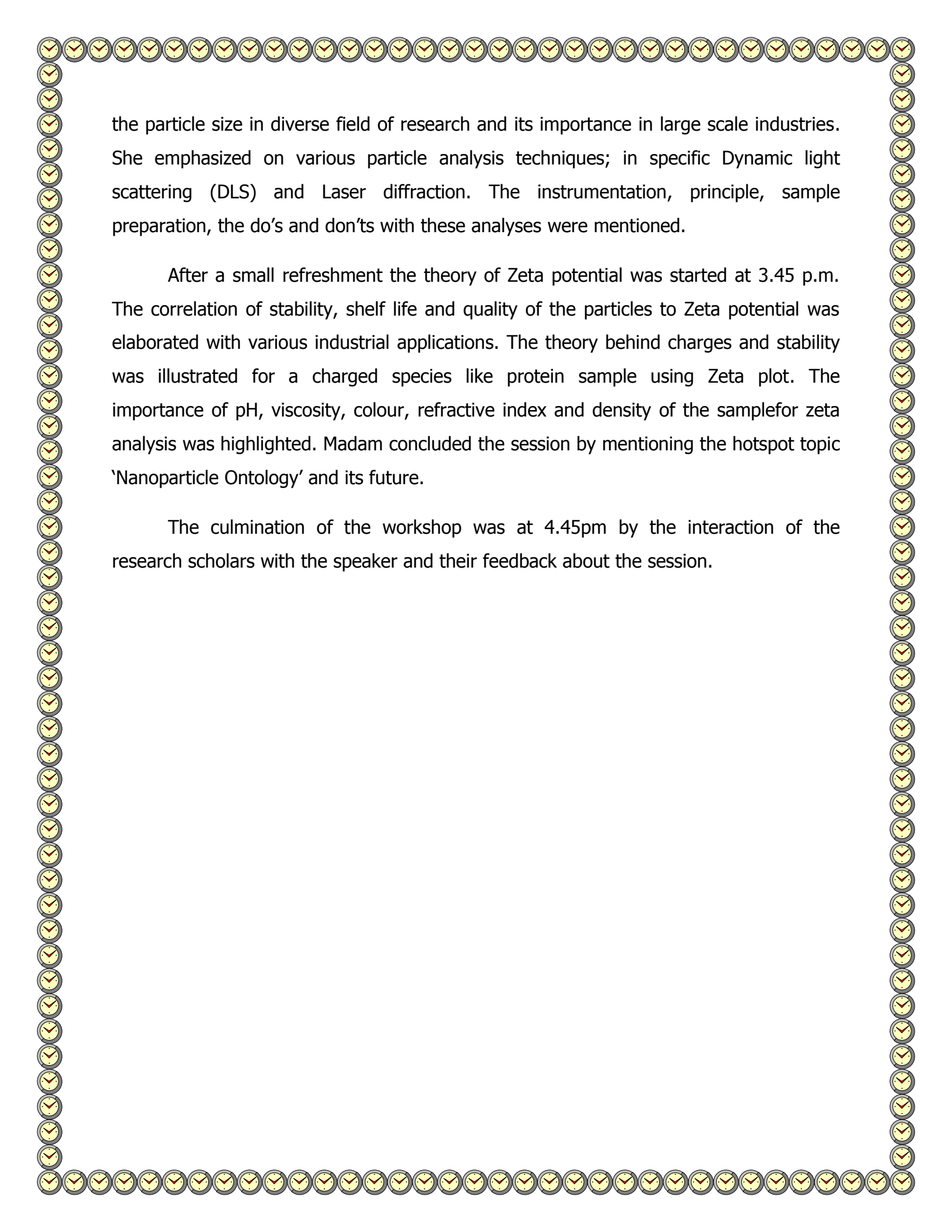
The "Zeta Potential and Particle size analysis" workshop is organized to provide Researchers - postgraduate-level students and faculty in Physics, Chemistry, Zoology, Botany, Nutrition, Bio-Science and selected engineering disciplines with basic knowledge of the Zeta potential and particle size analysis. It includes introductory lectures on theoretical aspects of Zeta potential and applications. The workshop is intended to provide researchers with the technique of particle size analysis with specific examples that may provide a deeper understanding of the mechanism underlying particle size analysis

Fee: Registration Fee Rs.50/- for refreshment and certificate.

Report

Workshop on Zeta Potential and Particle size analysis organized by Research and Development Cell (RDC) was held on 21.6.2022 at 2.00 p.m in Gallery. Dr. Aruna Dhathathreyan, Research Mentor Cum Consultant of our institution was the speaker of the day. About 47 participants including faculty members and Research scholars from Chemistry, Physics, Zoology, Food Science and Nutrition and, Textiles & Clothing were the beneficiaries of the event. The event started with a prayer song followed by the formal welcome address delivered by Dr.P.Lalitha, Dean i/c Research & Consultancy, Professor of Chemistry at 2.05 p.m Madam mentioned about the importance of the material characterization and highlighted the necessity of particle size analysis.

Dr. Aruna initiated the workshop at 2.15 p.m by illustrating various terminologies such as dispersion, suspension, formulation, precipitation, agglomeration, flocs, and emulsion with real life examples. Madam focused on Particles, importance of measuring



the particle size in diverse field of research and its importance in large scale industries. She emphasized on various particle analysis techniques; in specific Dynamic light scattering (DLS) and Laser diffraction. The instrumentation, principle, sample preparation, the do's and don'ts with these analyses were mentioned.

After a small refreshment the theory of Zeta potential was started at 3.45 p.m. The correlation of stability, shelf life and quality of the particles to Zeta potential was elaborated with various industrial applications. The theory behind charges and stability was illustrated for a charged species like protein sample using Zeta plot. The importance of pH, viscosity, colour, refractive index and density of the sample for zeta analysis was highlighted. Madam concluded the session by mentioning the hotspot topic 'Nanoparticle Ontology' and its future.

The culmination of the workshop was at 4.45pm by the interaction of the research scholars with the speaker and their feedback about the session.

Glimpses of the workshop

Figure 1: Dr.P. Lalitha, Dean i/c Research & Consultancy welcoming the gathering



Figure 2: The gathering encompassing the research scholars from various schools

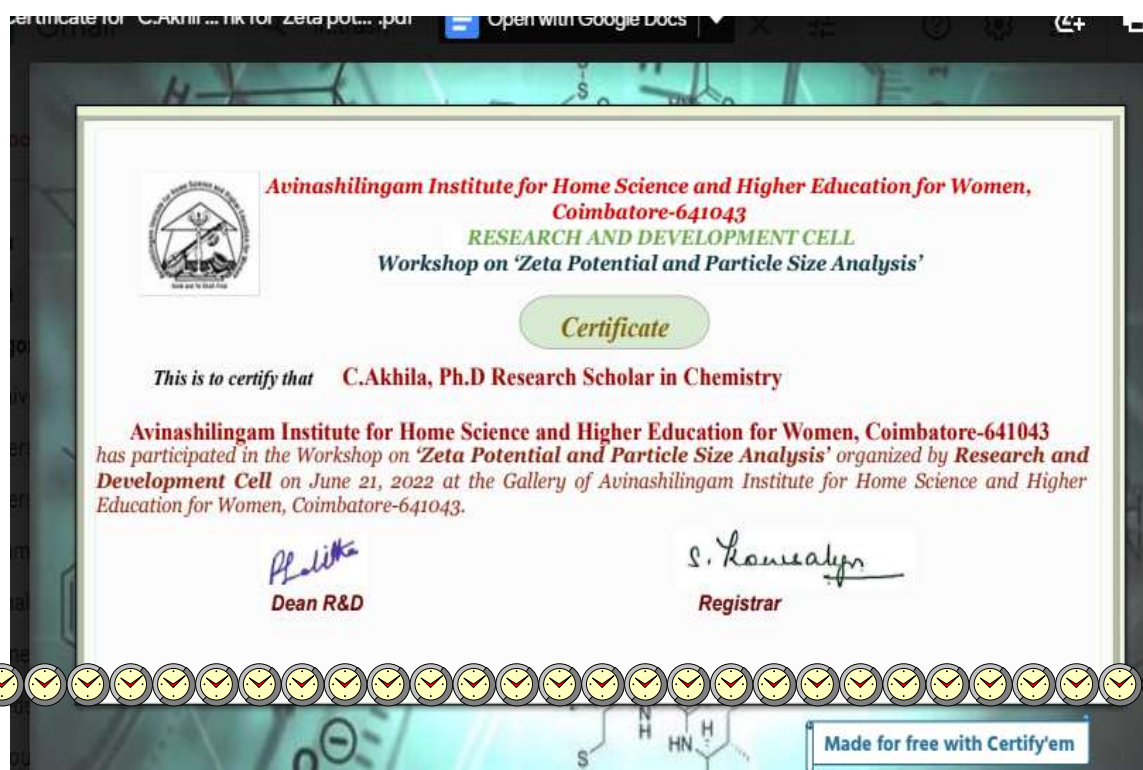
Figure 3: Ms. PonNivetha Introducing the Speaker to the audience



Figure 4: Dr Aruna Interacting with the participants



Figure 5: Interaction session and feedback by the participants





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Coimbatore - 641 043, Tamil Nadu, India

Cordially invites you for

A Workshop on

Zeta potential and particle size analysis

Organized by

Research and Development Cell

21.06.22

S.no	Name	Department	signature
1.	Dr.S. Anitha	Asst Prof in Physics	S. Anitha
2.	NIVEDHA.K	Ph.D Scholar (Textiles & Clothing FT)	K. Nivedha
3.	Suetha.S	Ph.D (Textiles & Clothing FT)	S. Suetha
4.	Siva Dhanshini.S	Ph.D (Textiles & Clothing, FT)	S. Siva Dhanshini
5.	V. Ranya	Ph.D (Textiles & Clothing FT)	V. Ranya
6.	AMRISA PAVITHRA.E	Ph.D. Zoology	A. Pavithra
7.	SWATHI LAKSHMI.A.V.	PhD., ZOOLOGY	A.V. Swathi
8.	SANTHANAMBIKA.M.S.	Ph.D., ZOOLOGY	M.S. Santanambika
9.	DEEPIKA.E	Ph.D., ZOOLOGY	E. Deepika
10.	GREETHAMALA.G.V.	Ph.D., ZOOLOGY	G.V. Greethamala
11.	SWATHI.R	Ph.D PHYSICS	R. Swathi
12.	BHUVANESWARI.V	Ph.D PHYSICS	V. Bhuvaneshwari
13.	CHANDRALEKHA N.R	Ph.D PHYSICS	N.R. Chandralekha
14.	SHAMLI.T.C	Ph.D PHYSICS	T.C. Shamli
15.	R. Karthikeyani	Ph.D Physics	R. Karthikeyani
16.	Somali Elyosh	Ph.D food Science & Nutrition	Elyosh.Somali
17.	SUGANYA.A	PHD FSN	A. Suganya
18.	Ritas chakraborty	Ph.D FSN	Ritas Chakraborty
19.	Sri Gayathri "	"	Sri Gayathri
20.	Sruitha kavya	"	Sruitha Kavya
21.	Sara Jyoti	PhD FSN	Jyoti.Sara
22.	Melawankini Maunad	PHD FSN	Melawankini Maunad
23.	PHARELCHON KASHUNG	PHD FSN	Pharelchon Kashung
24.	A. Abinaya	PhD. Chemistry (FI)	A. Abinaya

25	M. Shanmuga Priya	Ph. D chemistry	M. S. S. S.
26	Aruna. P	Ph. D chemistry	P. Aruna
27	Gaepthai. S	Ph. D Zoology (Post. Hon)	S. Gaepthai
28	R. Rajalakshmi	Ph. D Chemistry (FT)	R. Rajalakshmi
29	R. Dhanya Lemithi	Ph. D Chemistry (FT)	R. Dhanya Lemithi
30	L. Keesarasa	Ph. D Chemistry (FT)	L. Keesarasa
✓ 31	S. M. DEVIATHA	Ph. D Food Science & N (FT)	S. M. Deviatha
✓ 32	Nongmaithem Babitha Devi	Ph. D Food Sc & N (FT)	Nongmaithem Babitha Devi
33	Akhila. C	Ph. D Chemistry (FT)	Akhila. C
34	Bon Nivetha A	Ph. D Chemistry (FT)	Bon Nivetha A
35	K. Thirisha	Ph. D Chemistry (FT)	K. Thirisha
36	S. Vyshnavi	Ph. D Chemistry (FT)	S. Vyshnavi
37	B. NANDINI	Ph. D Chemistry (FT)	B. NANDINI
38	SIVASANKARI. J	Ph. D Chemistry (FT)	SIVASANKARI. J
39	Sandhu. S	Ph. D Chemistry (FT)	Sandhu. S
40	Tharani. S	Ph. D Chemistry (FT)	Tharani. S
41	Kiruthika. S	Ph. D Chemistry (FT)	Kiruthika. S
42	DHIVYA. C	Ph. D Chemistry (FT)	DHIVYA. C
43	MEHANA. P	Ph. D. Physics (FT)	MEHANA. P
44	BAMA. S	Ph. D (FSN) (FT)	BAMA. S
✓ 45	R. Kirthika	Ph. D (FSN) (FT)	R. Kirthika
✓ 46	D. Pushpanani	Ph. D (FSN) (FT)	D. Pushpanani
✓ 47	B. Uthral	Ph. D (FSN) (FT)	B. Uthral
48	I. Jomani.	Ph. D (FSN) (FT)	I. Jomani.

No. of beneficiaries: 48

The image shows a screenshot of a Google Forms survey titled "Zeta potential feedback and certificate". The browser address bar shows the URL: docs.google.com/forms/d/10E-zfAb3UF33Xmi1iuVPesZZUePUk28ZJIPfms1r4s/edit. The form has 1,338 responses and 0 total points. The main content of the form includes a header image of laboratory glassware (Erlenmeyer flasks) containing colored liquids (blue, purple, red). Below the image is a text box with the title "Feedback link for 'Zeta potential and Particle size'" and the instruction "Kindly give your feedback and help us to improve". There are two required text input fields: "Email *" with a "Valid email" error message and "Full Name with salutation(Ms/Mr/Mrs/Dr) and your class or designation (as you want in certificate. Eg. T.Anitha, II PG Commerce)". A "Send" button is visible in the top right corner of the form interface. The Windows taskbar at the bottom shows icons for Internet Explorer, File Explorer, Word, and Chrome, with the system clock displaying 3:35 PM on 25-Jun-22.

Zeta potential feedback and certificate

docs.google.com/forms/d/10E-zfAb3UF33Xmf1iuVPesZZUePUk28ZJIPfms1r4s/edit

Zeta potential feedback and certificate

Questions Responses 1,338 Settings Total points: 0

Full Name with salutation(Ms/Mr/Mrs/Dr) and your class or designation (as you want in certificate. Eg. T.Anitha, II PG Commerce) *

Short answer text

Institution *

Short answer text

How satisfied were you with the event? 1 is poor 2 is fair 3 is good 4 is very good 5 is excellent , *

1 2 3 4 5

1 2 3 4 5

Certificate for Mar...xlsx

Show all

3:35 PM 25-Jun-22

Zeta potential feedback and certificate

docs.google.com/forms/d/10E-zfAb3UF33Xmi1uVPesZZUePUk28ZJIPfms1r4s/edit

Zeta potential feedback and certificate

Questions Responses 1,338 Settings Total points: 0

How would do rate the relevance of the topic.? 1 is poor 2 is fair. 3 is good. 4 is very good 5 is excellent ,

1 2 3 4 5

Any other comments or suggestions *

Long answer text

How is this topic useful to your research work? *

Long answer text

Certificate for Mar...xlsx

Show all

3:35 PM 25-Jun-22

Time Stamp	Email	Name and Class	How were you satisfied with event. 5 excellent	How was the relevance of the topic 5-excellent	Nil	In material characterization , it will be very useful to find out the particle size of the sample.
6-25-2022 14:21:31	21phzop001@avinuty.ac.in	Ms.Gayathri S, Ph.D.Zoology (Part-time, Without M.Phil)	5	5	Nil	In material characterization , it will be very useful to find out the particle size of the sample.
6-25-2022 13:49:17	18phfnf006@avinuty.ac.in	Mrs. D. Pushparani, Ph.D Scholar, Food Science and Nutrition	5	5	Very informative session	useful
6-25-2022 12:18:34	21phphf003@avinuty.ac.in	Ms R Karthikeyani Research Scholar, Department of Physics	5	5	No	Very much
6-25-2022 12:15:30	21phphf003@avinuty.ac.in	MS R. KARTHIKEYANI Research Scholar, Department of PHYSICS	5	5	No	Very much
6-25-2022 11:54:39	21phphf003@avinuty.a.in	Ms. R. Karthikeyani Research scholar, Department of PHYSICS	5	5	no	very much
6-25-2022 9:25:42	21phtcf004@avinuty.ac.in	S.Suvetha, Ph.D Textiles and clothing	4	3	Good	Yes it's use full for research
6-25-2022 7:25:03	raajichemist@gmail.com	R.Rajalakshmi, Ph.D Chemistry	5	5	Informative session	
6-24-2022 22:29:33	19phzof006@avinuty.ac.in	Ms. SANTHANAMBIKA M S, Research Scholar in Zoology	5	5	Excellent session Mam. Thank you so much mam	Absolutely Mam, I have got to know about the purpose of zeta potention and particle size analysis
6-24-2022 22:12:08	19phchf002@avinuty.ac.in	Ms. S. Kiruthika, Research Scholar in Chemistry	4	4	No	Interpretation
6-24-2022 21:27:20	20phchf005@avinuty.ac.in	Ms. Pon Nivetha A, Research Scholar	5	5	Very informative and elaborate from	Very needful topic

					sample preparation to interpretation	
6-24-2022 20:52:03	chandralekhara gu@gmail.com	Ms. N. R Chandralekha Research Scholar	5	5	Nothing	Informative session
6-24-2022 20:48:02	21phchf002@ avinuty.ac.in	S. Sindhu, PhD in chemistry	4	4	Very useful.	Very useful to get our work recognized.
6-24-2022 20:26:27	21phtcf003@ avinuty.ac.in	Nivedha K	5	5	No	Very informative
6-24-2022 20:05:32	21phphp001@ avinuty.ac.in	Ms.V.Bhuvaneswari, Research scholar,Physics	4	3	Good	Good
6-24-2022 19:13:35	20phfnf003@ avinuty.ac.in	S.M.Devatha, Ph.D Food Science and Nutrition	5	5	No	Yes
6-24-2022 19:08:28	21phchf001@ avinuty.ac.in	Ms.B.Nandini, Ph.D in Chemistry	5	5	Very informative and very useful to me	It is use for my further research work to study very small size particles
6-24-2022 19:06:14	21phphf004@ avinuty.ac.in	T.C.Shamli, I Ph.D Physics	5	5	None	Good and Informative session
6-24-2022 19:05:47	shanmugapriya thechemist@gmail.com	Ms. Shanmuga Priya M, Ph D chemistry	5	5	Very useful	This is useful for material characterization
6-24-2022 19:04:51	21phphf004@ avinuty.ac.in	T.C.Shamli, I Ph.D Physics	5	5	None	Good and Informative session
6-24-2022 19:04:00	21phphf004@ avinuty.ac.in	T.C.Shamli, I Ph.D	5	5	None	Good and Informative session
6-24-2022 19:03:10	20phphf002@ avinuty.ac.in	Ms. P. Mehana	5	5	Need more session like this	I learnt a lot
6-24-2022 19:00:43	tharaniphd@gmail.com	Ms. S. THARANI	5	5	Nice	Very informative
6-24-2022 18:59:40	19phfnp001@ avinuty.ac.in	Mrs.Titas Chakraborty	4	4	Ys	No

6-24- 2022 18:56:08	swathiputhukk at@gmail.com	Swathi R	4	4	Nil	Yes
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The organizers thank the authorities of the Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore for providing all facilities needed for the conduct of this workshop



Plakka
25/6/2022

