

From

Dr. Nivedita Lalitha Raveendran  
Chengalath  
Chirakkal Post  
Kannur – 670011  
Kerala  
17/10/2021

To

The Visa Officer  
The Israel Visa Application Centre  
S-519, 5th floor, South Block Manipal Centre  
47, Dickenson road, Bengaluru – 560042

Sir / Madam,

Sub: Requisition for A2 visa – reg.

I, Nivedita Lalitha Raveendran holding passport number Z5936242, will be joining Technion – Israel Institute of Technology as a postdoctoral researcher. I would like to apply for the A2 visa so that I can join Technion to take up the postdoctoral fellowship which is for a year (September 30, 2022).

Please find the visa application form duly filled and signed along with the valid passport, photographs and the relevant documents for your perusal.

Kindly consider the application and grant necessary visa. Please do let me know if any other information is required.

Yours sincerely,



(Nivedita L. Raveendran)





25936242

पिता / कर्तव्य अतिथि: का नाम / Name of Father / Legal Guardian

RAVEENDRAN KALATHIL

माता का नाम / Name of Mother

LALITHA CHENGALATH RAVEENDRANATH

पति (या पत्नी) का नाम / Name of Spouse

पता / Address

CHENGALATH

CHIRAKKAL PO, KANNUR

PIN: 670011, KERALA, INDIA

पुराने पासपोर्ट का नं. और उसके जारी होने की तिथि का स्थान / Old Passport No. with Date and Place of Issue

J4875466

27/12/2010

KOZHIKODE

पासपोर्ट नं. / Ede No.

K01073129501920





शिक्षण से पहले वाले भारतीय नागरिकों को सलाह दी जाती है कि वे निम्नलिखित भारतीय मिशन/केम्प में अपना रजिस्ट्रेशन करावाए।

**राजकीकरण**

यह पासपोर्ट भारत सरकार की सम्पत्ति है। इस पासपोर्ट के बारे में किसी पासपोर्ट अधिकारी से इसके धारक को यदि कोई सूचना मिलती है जिसमें पासपोर्ट लौटाने की मांग भी शामिल है तो उसका तुरंत अनुपालन किया जाए।

**चेतावनी**

यह पासपोर्ट इसके द्वारा किसी भी देश में बाहर न भेजा जाए। यह पासपोर्ट धारक या उसके द्वारा प्राधिकृत व्यक्ति के कब्जे में हो होगा चाहिए। इसमें किसी भी प्रकार का फेरबदल या विकृति नहीं की जानी चाहिए।

पासपोर्ट नुस हो जाने, खोते हो जाने अथवा नष्ट हो जाने पर इसकी सूचना भारत में रखते निम्नलिखित पासपोर्ट अधिकारी को अथवा यदि पासपोर्ट धारक विदेश में है तो निम्नलिखित भारतीय मिशन/केम्प और स्थानीय पुलिस की सहायता ली जानी चाहिए। विपन्न परिस्थिति के बाद ही दुप्लीकेट पासपोर्ट जारी किया जाएगा।

**REGISTRATION**

INDIAN CITIZENS RESIDENT ABROAD ARE ADVISED TO REGISTER THEMSELVES AT THE NEAREST INDIAN MISSION/POST

**CAUTION**

THIS PASSPORT IS THE PROPERTY OF THE GOVERNMENT OF INDIA. ANY COMMUNICATION RECEIVED BY THE HOLDER FROM A PASSPORT AUTHORITY REGARDING THIS PASSPORT, INCLUDING DEMAND FOR ITS SURRENDER, SHOULD BE COMPLIED WITH IMMEDIATELY.

THIS PASSPORT SHOULD NOT BE SENT OUT OF ANY COUNTRY BY POST. THIS SHOULD BE IN THE CUSTODY EITHER OF THE HOLDER OR OF A PERSON AUTHORIZED BY THE HOLDER. IT MUST NOT BE ALTERED OR MUTILATED IN ANY WAY.

LOSS, THEFT OR DESTRUCTION OF THIS PASSPORT SHOULD BE IMMEDIATELY REPORTED TO THE NEAREST PASSPORT AUTHORITY IN INDIA OR IF THE HOLDER IS ABROAD, TO THE NEAREST INDIAN MISSION/POST AND TO THE LOCAL POLICE. ONLY AFTER EXHAUSTIVE ENQUIRIES SHALL A DUPLICATE PASSPORT BE ISSUED.

नाम / नामगी अधिकाधिक से नाम / Name of Father / Legal Guardian

**RAVEENDRAN KALATHIL  
LALITHA CHENGALATH RAVEENDRANATH**

पति या पत्नी का नाम / Name of Spouse

पता / Address

**CHENGALATH**

**CHIRAKKAL POST**

**KANNUR DT , KERALA - 670011**

इसके पासपोर्ट का नं. और इसके जारी होने का तिथि का नं. / Old Passport No. with Date and Place of Issue

फाइल नं. / File No.

**K02B08594610**



September 9, 2021

Dr. Nivedita L. Raveendran  
Department of Materials Science and Engineering  
Technion, I.I.T  
Haifa

Dear Dr. Raveendran,

It is a pleasure to inform you that you were awarded a Postdoctoral Fellowship in Technion's Department of Materials Science and Engineering for a period of 12 months starting October 1, 2021.

In the framework of this Fellowship you will receive a monthly stipend of 7,500NIS for the duration of your stay at the Technion. In addition, you will get one direct flight airfare, economy class or similar, from your hometown to Israel and back (you will be reimbursed for the ticket up to US\$600, against receipt or copy of the ticket).

Please note that you should have health insurance for the duration of your stay at the Technion (and if applicable, so should your companions). You can either pre-arrange such insurance or, if you prefer, we could refer you to a local insurance agent upon your arrival at the Technion.

The invitation is subject to the Technion by-laws, regulations and procedures. Particularly, absence and travel abroad require approval of the Technion authorities. Information about your assignments, duties, responsibilities and other details will be conveyed to you by the Chairman of the Department and by your host.

I would appreciate your response to this invitation by returning to your hosting department a signed copy of this letter stating your agreement with its terms.

Congratulations and best wishes for a productive and pleasant stay at the Technion.

Sincerely yours,

*Shimon Marom*

Professor Shimon Marom,  
Executive Vice President for Academic Affairs

Attached: Regulations for Post-Doctorate Fellows

I hereby accept this invitation and its terms.

Signature: *Nivedita*

Date : 09/09/2021

העתקים:

פרופ' יאיר עין-אלי – דיקן הפקולטה למדע והנדסה של חומרים  
ד"ר יונתן קלהורה – הפקולטה למדע והנדסה של חומרים  
גב' מיכל כפתורי – אכו"ב  
עו"ד ורדית רז-טולדנו – הממונה על לשכת הסגל האקדמי  
שמ/אק

כ"ז באב תש"פ

17/08/2020

מספרנו 2020-0011652

אוניברסיטאות

לכבוד  
ראש מוסד הלימוד  
הטכניון  
שלום רב,

הנדון: אישור כניסת תלמידים לשנת הלימודים הקרובה

1. נציג משרד הבריאות אישר כי מוסד הלימודים שאתה מייצג, הטכניון, עומד בתנאי הגידוד.  
2. ניתן להפנות את התלמידים לנציגות ישראל בחו"ל לצורך הגשת בקשה בהתאם לנוהל, כנוסף למסמכים שבתנאים ובדרישות של הנוהל יידרש התלמיד להציג את המסמכים הנאים.
  - מכתב קבלה ללימודים הכולל תאריך תחילת לימודים.
  - מכתב התחייבות של מוסד הלימודים לעמוד בכללי משרד הבריאות (טופס הצהרת הבריאות).
  - אישור משרד הבריאות שניתן למוסד הלימודי... (מצ"ב האישור).
3. התלמיד יקבל אשרת כניסה א/2 ואישור כניסה לישראל, אישור זה יינתן לכל היותר 30 יום לפני תחילת הלימודים.
4. להזכירך, במהלך תקופת הבידוד נציגי האכיפה יערכו ביקורת תדיר כדי לבדוק האם המוסד עומד בהתחייבותו בתנאי הבידוד.

תודה על שיתוף הפעולה ובהצלחה.

  
נברכה  
מיכל יוסמן  
מנהלת אגף

העתק: מר אייל סיסו, רח"ט לעניינים קונסולריים, משרד החוץ.  
גבי רות טרובילוב מנהלת לשכת חיפה



מדינת ישראל  
State of Israel

Nivedita L. Raveendran

רשות האוכלוסין וההגירה  
Population & Immigration Authority  
سلطة السكان والهجرة



מינהל האוכלוסין - אגף אוכלוסיות זמניות  
Temporary population department

### אישור בריאות למוסד הלימודי - הטכניון

משרד הבריאות אישר כי המוסד הלימודי-הטכניון עומד בתנאים שנקבעו על בסיס הצהרת הבריאות עליה חתם ראש המוסד הלימודי.

### מאושר בכפוף לדיווח על זהות המבטח הרפואי

אישור זה ניתן עבור כניסת תלמידי המוסד לארץ ותקף נ כל שלא יתגלו הפרות בכללים שנקבעו.



רשות האוכלוסין וההגירה

תאריך: 17/08/2020





מדינת ישראל  
State of Israel

רשות האוכלוסין וההגירה  
Population & Immigration Authority  
سلطنة التعداد والهجرة



מינהל האוכלוסין - אגף אוכלוסיות זמניות  
Temporary population department

**הצהרת בריאות – מוסד לימודי**

האחריות המלאה על שמירת ההנחיות כלשונו היא של ראש המוסד הלימודי, חל עליו אינן האחריות בהקפדה על ההנחיות על פי דין בצד בריאות העם למשך 14 יום מיום ההגעה.

1. בעת כניסתו של התלמיד מרז"ל יש לדאוג כי נהג בדרך יסיע את חולמיו: ל מקום הבידוד (אין להשתמש בתחבורה ציבורית).
2. אזור חודי הבידוד צריך להיות מופרד לחלוטין מאזור מגורי התלמידים שאינם בבידוד.
3. ניתן לבודד עד שישה תלמידים באזור בידוד נפרד בעל שירותים ומקלחת ייעודיים לאזור זה.
4. על מוסד הלימוד לספק את כל צרכי המזון, פינוי אשפה וכביסה למבודדי אזור כל תקופת הבידוד.
5. יש למנות איש קשר מסעם המוסד כממונה על קשר עם המבודדים, איש וקשר ידאג לכל צרכם בכדי שאלו לא יצאו מהחדר.
6. תלמיד שאינו חש בטוב או מפתח תסמינים לקורונה יש ליצור קשר מיידי עם איש הקשר במוסד, על מוסד הלימוד לדאוג להעבירו לטיפול לפי מצבו הרפואי.
7. במקרה ונמצא חולה קורונה מאומת מבין התלמידים השוהים בבידוד קבוצתי באחריות המוסד הלימודי לדאוג להעביר את כלל התלמידים המבודדים, מאומת אזור בידוד, לבידוד אישי.
8. לכל תלמיד יינתן טופס הסכמה מודעת המפרט את סכנות הבידוד הקבוצתי.
9. במקרה של סגירת מוסד הלימוד עקב סגר או אי פתיחת שנת הלימודים על המוסד הלימודי לדאוג לכל צרכי התלמיד ולהבטיח כי מקום המגורים יאפשר לתלמיד לקיים את כל הנחיות משרד הבריאות.
10. למוסד ממונה קורונה מוסדי אשר יבין את המוסד לעמוד בתנאי הבידוד ויבטיח על קיום הכללים.

שם הממונה: קיאוליה תפקיד: סגנית יקרון טלפון: 0544377115

זהבית לניצחון  
ממנכ"ל תפעול

האחריות המלאה בשמירת הבידוד היא של המוסד הלימודים ושל כל תלמיד.

על החתום ראש המוסד או המנכ"ל

שם מרז"ל: בזא שם משפחה: הר תפקיד: מנכ"ל

שם מוסד הלימוד: התנ"ך חתימה: [חתימה] חותמת: פרופ' בועז גולני  
משנה לנשיא ומנכ"ל

תאריך: 28-7-20 כותבת מייל: \_\_\_\_\_ טלפון: \_\_\_\_\_

יום רביעי 29 יולי 2020

לכבוד: משרד הבריאות

**הנדון: פירוט תנאי בידוד של סטודנטים ששבים מחו"ל בטכניון – מכון טכנולוגי לישראל**

1. **כתובת מתקן הבידוד:**  
הסטודנטים יהיו בבידוד בבית הארחה "פורשהיימר", או במעונות הטכניון. שני המתקנים נמצאים בקמפוס הטכניון בחיפה, קריית הטכניון, 3200003.
2. **תנאי הבידוד:**  
בית הארחה "פורשהיימר": יחידת הדיור מורכבת מחדר יחיד, בו מקלחת ושירותים, ומטבח בתוך היחידה.  
מעונות "צוה אמריקה": דירה המכילה חמישה או שישה חדרים (פרטיים), ושני חדרים שירותים ומקלחת. בכל יחידה ישונו עד חמישה מבודדים. המטבח בדירה משותף.  
החדרים מצוידים בשקיות אספה אותן המבודדים נדרשים להוציא מחוץ לדלת הדירה במעד מוגדר אחת ליומיים, בשקית כפולה, ונאספים על ידי חברת ניקיון.
3. **שיטת אספקת המזון:** צוות של רכזים חברתיים המועסקים במרכז הבינלאומי בטכניון מסייע למבודדים באספקת מזון והזמנתו.
  - א. הרכזים יוצרים קשר עם המבודדים בטרם הגעתם ומקבלים מהם פירוט אודות המצרכים אותם המבודדים מבקשים לרכוש.
  - ב. הרכזים עורכים את הקניות או לחלופין עושים הזמנה באמצעות שליח.
  - ג. המצרכים מונחים מחוץ לחדר בבית הארחה/ בפתח הדירה של המבודדים.
4. **שיטת פיקוח ובקרה:**  
אחראיות על טיפול בסטודנטים בינלאומיים יוצרת קשר עם הסטודנטים בטרם הגעתם ושולחת את הנחיות משרד הבריאות לבידוד ביתי. בטספ, ישנו קשר רציף עם המבודדים בזמן שהותם בבידוד, על מנת לוודא כי הם מרגישים טוב, האם הופיעו להם סימפטומים של הווירוס, האם הם מרגישים טוב מבחינה נפשית והאם הם זקוקים למצרכים שונים.  
רשימת המבודדים מועברת ליחידת הביטחון של הטכניון בטרם הגעתם.
5. **שם איש הקשר ותפקידו:**  
מיכל קיסרי, אחראית על טיפול בסטודנטים בינלאומיים
6. **פרטים על הסיוע הרפואי ובדגש על תהליך המידע במקרה והתלמיד מפתח תסמיני מחלה:**  
במסגרת העברת הנחיות, המבודדים מודעים מהם הסימפטומים האופייניים למחלה, וכך מתבקשים בטרם ההגעה להצטייד במד חום.  
במקרה של הופעת סימפטומים המבודדים נדרשים לידע את האחראית על טיפול בסטודנטים באופן במייד.

במידה והסטודנטים מבוטחים בביטוח בריאות ישראלי, אחראית על טיפול בסטודנטים בינלאומיים מייזעת את חברת הביטוח אשר יוצרת קשר עם הסטודנט ועם קופת החולים, ובמקביל מייזעת את נציגת משרד הבריאות במחוז חיפה ואת גורמי ההנהלה בטכניון.



13/09/2021

לכבוד  
שגרירות ישראל

הנדון: אשרת כניסה למשתלמת Nivedita Lalitha Raveendran

הנ"ל מוזמנת כמשתלמת בתר-דוקטורט לפקולטה ל \_\_\_\_\_ מדע והנדסה של חומרים \_\_\_\_\_

מנחה ההשתלמות: \_\_\_\_\_ ד"ר יונתן קלהורה \_\_\_\_\_

פרטי המשתלמת:

1. שם: Nivedita Lalitha Raveendran
2. תאריך לידה: 29/07/1987
3. אזרחות: הודית
4. מספר דרכון: Z5936242
5. מועד הגעה לטכניון: 01/10/2021
6. תקופת השהות: עד סוף ספטמבר 2022

נודה לכם באם תאשרו לנ"ל אשרת 2 עם כניסות חוזרות.

בתודה על שתוף הפעולה ובברכה,

שמעון מרום

פרופ' שמעון מרום  
המשנה לנשיא לעניינים אקדמיים



**הנדון: התחייבות בקשר לקבלת אישור כניסה פרטני למדינת ישראל**

הואיל ופנית בבקשה לקבלת אישור פרטני לכניסה לישראל, מצ"ב טופס התחייבות לחתימתך המהווה תנאי לאישור הכניסה.

**Subject: obligations regarding individual permission to enter The State of Israel**

-

**As you have applied for an individual permit to enter Israel, attached is a commitment form for your signature, which is a condition for approval.**

שם החתום/המטה: Nivedita Lalitha Raveendran Name of the undersigned

ת"ז או דרכון: Z5936242 ID or Passport number

טלפון: +97248292429 Telephone number (where you can be reached in Israel)

place of isolation Full address Forchheimer Guest House, Neaman Institute Building, Haifa, Israel מקום הבידוד (כתובת מלאה):

שם המארח Technion – Israel Institute of Technology Name of host

מספר טלפון של המארח +97248292429 host number phone

אני החתום/המטה מתחייבת בזאת לעמוד בתנאים המפורטים להלן:

I, the undersigned, hereby guarantee that the applicants, who are not residents of Israel, comply with the following conditions:

1. אני מכירה את ההנחיות לבידוד בית המפורסמות באתר משרד הבריאות.  
Applicants are familiar with the guidelines for home isolation available on the Ministry of Health website.

2. אני מתחייבת לפעול בהתאם להנחיות המפורסמות באתר משרד הבריאות.  
Applicants have pledged to follow the guidelines published on the Ministry of Health website.

3. אני מתחייבת לדווח למשרד הבריאות על שהותי בבידוד בית באתר:  
I undertake to report my home isolation to the ministry of health at:

<https://govforms.gov.il/mw/forms/HouseIsolation@health.gov.il>



4. אני מתחייבת כי הנסיעה משדה התעופה לדירה בה ישוהו בבידוד תהיה ברכב פרטי בלבד) ולא בתחבורה ציבורית, ובכלל זה מונית).

Applicants will travel from the airport to the address where they will stay in isolation only by private vehicle (and not by public transport, including taxis).

5. אני מתחייבת למדוד חום גוף מדי יום במהלך 14 הימים החל מיום הנחיתה בארץ.  
Applicants will measure body temperature daily during the 14 days from the date of landing in the country.

6. בכל מקרה של הופעת חום מעל 38 מעלות, שיעול, קושי בנשימה או תסמין נשימתי אחר, אני מתחייבת לדווח באופן מיידי למשרד הבריאות באמצעות מוקד מד"א 101  
In the event of a fever above 38 degrees, or coughing, or difficulty breathing or other respiratory symptoms, applicants should immediately report to the Health Ministry by 101

חתימה: Nivedita Lalitha Raveendran  
תאריך: 17/10/2021



Ministry of Health & Family Welfare  
Government of India

## Final Certificate for COVID-19 Vaccination

### Beneficiary Details

Beneficiary Name	<b>Nivedita L Raveendran</b>
Age	<b>34</b>
Gender	<b>Female</b>
ID Verified	<b>PAN Card # CFOPR2200G</b>
Unique Health ID (UHID)	
Beneficiary Reference ID	<b>83462901624500</b>

### Vaccination Details

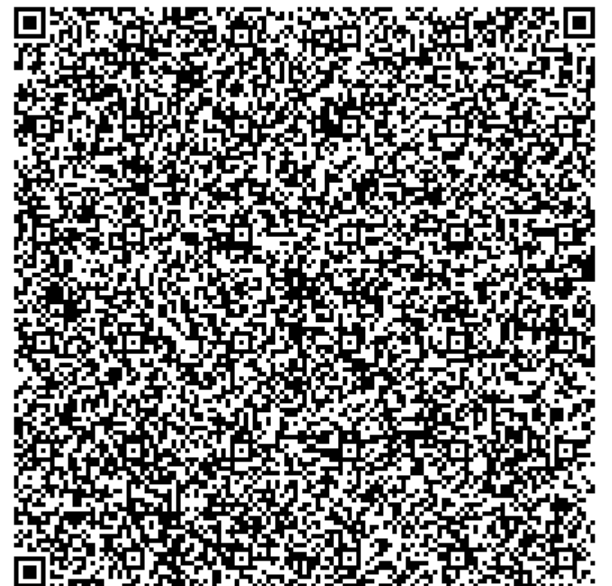
Vaccine Name	<b>COVISHIELD</b>
Date of 1 <sup>st</sup> Dose	<b>05 Jun 2021 (Batch no. 4121Z086)</b>
Date of 2 <sup>nd</sup> Dose	<b>28 Aug 2021 (Batch no. 4121Z129)</b>
Vaccinated by	<b>LINE V</b>
Vaccination at	<b>DHANALAKSHMI HOSPITAL</b>



Together, India will defeat  
COVID-19”

- Prime Minister Narendra Modi

In case of any adverse events, kindly contact the nearest Public Health Center/  
Healthcare Worker/District Immunization Officer/State Helpline No. 1075



**COWIN**  
Winning Over COVID

This certificate can be verified by scanning the QR code at  
<http://verify.cowin.gov.in>

October 10, 2021

To whom it may concern,

We hereby confirm that:

Ms. **Lalitha Raveendran Nivedita** passport No. **Z5936242** is insured by our company according to the Tour & Care insurance policy. The policy is valid from **15/11/2021** to **30/09/2022**.

The Policy covers COVID-19 in accordance with and subject to the terms of the Policy and the underwriting policy of the Company.

The policy is supported by a 24 hour service:  
In Israel Through Harel Insurance Company LTD.  
Tel no. 972-3-7547020 Fax no. 972-3-7348168

Sincerely, Harel Insurance Company



## Your trip

Booking ref: **4QSFT5** [Check trip itinerary](#)  
 Document Issue Date: **17 October 2021**

Traveler	<b>Nivedita Lalitha Raveendran</b>	Agency	<b>BOOKOTRIP LLC</b> 800 W Airport Freeway, Ste 1100 IRVING TX 75062
		Telephone	<b>972 456-9999</b>
		Fax	<b>972 456 9898</b>
		Email	<b>sales@bookotrip.com</b>



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Wednesday 17 November 2021

	<b>Etihad Airways EY 281</b>		
<a href="#">Check-in</a>	Departure	<b>17 November 02:45</b>	<b>Kochi, (Kochi International) (+)</b>
	Arrival	<b>17 November 05:30</b>	<b>Abu Dhabi, (International) (+)</b>
	Duration		04:15 (Non stop)
	Booking status		Confirmed
	Class		Economy (L)
	Equipment		BOEING 787-10
	Flight meal		Meal
			<b>Terminal: 3</b>
			<b>Terminal: 1</b>

Wednesday 17 November 2021

	<b>Etihad Airways EY 598</b>		
<a href="#">Check-in</a>	Departure	<b>17 November 10:05</b>	<b>Abu Dhabi, (International) (+)</b>
	Arrival	<b>17 November 11:30</b>	<b>Tel Aviv Yafo, (Ben Gurion Intl) (+)</b>
	Duration		03:25 (Non stop)
	Booking status		Confirmed
	Class		Economy (L)
	Equipment		BOEING 787-9
	Flight meal		Meal
			<b>Terminal: 3</b>

### General Information

#### Ecological information

Calculated average CO2 emission is 363.23 kg/person

Source: ICAO Carbon Emissions Calculator

<http://www.icao.int/environmental-protection/CarbonOffset/Pages/default.aspx>

### Airline Booking Reference(s)

EY (Etihad Airways): CUSEYB

**Data Protection Notice:** Your personal data will be processed in accordance with the applicable carrier's privacy policy and, if your booking is made via a reservation system provider ("GDS"), with its privacy policy. These are available at <http://www.iatatravelcenter.com/privacy> or from the carrier or GDS directly. You should read this documentation, which applies to your booking and specifies, for example, how your personal data is collected, stored, used, disclosed and transferred. (applicable for interline carriage).



**NIVEDITA L RAVEENDRAN**

Joint Holder :- -

CHENGALATH PUZHATHI PO CHIRAKKAL

KANNUR

.....PUZHATHI

KANNUR

KERALA-INDIA

670011

Customer No :899089054  
Scheme :SB-PRIORITY BANKING  
Currency :INR

**Statement of Axis Account No :920010060690746 for the period (From : 16-04-2021 To : 15-10-2021)**

Tran Date	Chq No	Particulars	Debit	Credit	Balance	Init. Br
		<b>OPENING BALANCE</b>			<b>24119.00</b>	
03-05-2021		RD/921050052442624/NIVEDITA L RAVEENDRAN	5000.00		19119.00	159
06-05-2021		UPI/P2A/112616633136/RANJITH K/Bank of I/UPI		15000.00	34119.00	159
19-05-2021		UPI/P2A/113910455538/RANJITH K/Bank of I/UPI	25000.00		9119.00	159
23-05-2021		ECOM PUR/BSNL/MUMBAI/230521/13:38	946.00		8173.00	159
24-05-2021		UPI/P2M/114417308196/AMAZON/Axis Bank/You are	1240.40		6932.60	159
02-06-2021		RD/921050052442624/NIVEDITA L RAVEENDRAN	5000.00		1932.60	159
26-06-2021		UPI/P2A/117717282806/PRASADITA/State Ban/please		6500.00	8432.60	159
26-06-2021		UPI/P2M/117719811889/AMAZON/Axis Bank/You are	4427.00		4005.60	159
26-06-2021		UPI/P2M/117720905387/AMAZON/Axis Bank/You are	1499.00		2506.60	159
26-06-2021		ECOM PUR/BSNL/MUMBAI/260621/15:57	945.00		1561.60	159
01-07-2021		UPI/P2A/118243628564/RANJITH K/Bank of I/UPI		30000.00	31561.60	159
01-07-2021		UPI/P2A/118212546780/NIVEDITA /State Ban/ranjith	5000.00		26561.60	159
01-07-2021		RD/921050052442624/NIVEDITA L RAVEENDRAN	5000.00		21561.60	159
01-07-2021		920010060690746: Int.Pd:01-04-2021 to 30-06-2021		119.00	21680.60	159
06-07-2021		UPI/P2M/118713144987/billdeskt/ICICI Ban/UPI	946.00		20734.60	159
06-07-2021		UPI/P2A/118713201489/GOOGLEPAY/Axis Bank/UPI		20.00	20754.60	159
07-07-2021		UPI/P2M/118817576429/AMAZON/Axis Bank/You are	1138.00		19616.60	159
09-07-2021		UPI/P2M/119017343856/AMAZON/Axis Bank/You are	1500.00		18116.60	159
22-07-2021		UPI/P2M/120310908731/Razorpay /State Ban/SHAPEAI	5000.00		13116.60	159
22-07-2021		UPI/P2A/120317689855/PRASADITA/State Ban/amazon		4000.00	17116.60	159
22-07-2021		UPI/P2M/120317223927/AMAZON/Axis Bank/You are	960.00		16156.60	159
22-07-2021		UPI/P2A/120317353021/GOOGLEPAY/Axis Bank/Earned		3.00	16159.60	159
28-07-2021		UPI/P2M/120910533662/AMAZON/Axis Bank/You are	562.00		15597.60	159
01-08-2021		UPI/P2M/121315287872/AMAZON/Axis Bank/You are	570.00		15027.60	159
02-08-2021		RD/921050052442624/NIVEDITA L RAVEENDRAN	5000.00		10027.60	159
03-08-2021		UPI/P2M/121514527048/Payu Paym/HDFC BANK/Upi Tra	3193.00		6834.60	159

05-08-2021		UPI/P2A/121722433021/PRASADITA/State Ban/for ves		3000.00	9834.60	159
06-08-2021		UPI/P2M/121816562150/billdeskt/ICICI Ban/UPI	919.00		8915.60	159
06-08-2021		UPI/P2M/121823415757/AMAZON/Axis Bank/You are	268.00		8647.60	159
07-08-2021		UPI/P2M/121910463591/Vodafone /Paytm Pay/UPI	449.00		8198.60	159
07-08-2021		UPI/P2M/121914692823/AMAZON/Axis Bank/You are	1447.00		6751.60	159
07-08-2021		UPI/P2A/121914981233/PRASADITA/State Ban/Amazon		5500.00	12251.60	159
07-08-2021		UPI/P2M/121914988001/AMAZON/Axis Bank/You are	5174.00		7077.60	159
09-08-2021		UPI/P2M/122120250907/AMAZON/Axis Bank/You are	2203.00		4874.60	159
10-08-2021		UPI/P2M/122210724943/AMAZON/Axis Bank/You are	269.00		4605.60	159
10-08-2021		UPI/P2A/122216004861/GOOGLEPAY/Axis Bank/Earned		5.00	4610.60	159
10-08-2021		UPI/P2A/122216008095/GOOGLEPAY/Axis Bank/Earned		5.00	4615.60	159
10-08-2021		UPI/P2M/122218402600/AMAZON/Axis Bank/You are	299.00		4316.60	159
14-08-2021		UPI/P2M/122610889323/AMAZON/Axis Bank/You are	399.00		3917.60	159
14-08-2021		UPI/P2A/122620848986/MANO PRIY/Canara Ba/persona		20000.00	23917.60	159
14-08-2021		UPI/P2A/122620896694/NIVEDITA /State Ban/Mano re	20000.00		3917.60	159
15-08-2021		UPI/P2M/122711582120/AMAZON/Axis Bank/You are	1699.00		2218.60	159
16-08-2021		UPI/P2A/122809278775/NIVEDITA /State Ban/UPI		10000.00	12218.60	159
16-08-2021		UPI/P2M/122809559908/Flipkart/Yes Bank /UPI	4844.00		7374.60	159
16-08-2021		UPI/P2M/122810201780/wforwoman/Axis Bank/UPI Tra	5038.00		2336.60	159
17-08-2021		UPI/P2A/122904540401/Amazon Pa/Axis Bank/Refund		605.00	2941.60	159
17-08-2021		UPI/P2M/122908499262/AMAZON/Axis Bank/You are	575.00		2366.60	159
17-08-2021		UPI/P2A/122908687522/GOOGLEPAY/Axis Bank/Earned		4.00	2370.60	159
22-08-2021		UPI/P2A/123423066139/PRASADITA/State Ban/UPI	1.00		2369.60	159
23-08-2021		UPI/P2A/123511696906/PhonePe/Yes Bank /PhonePe		659.00	3028.60	159
23-08-2021		UPI/P2A/123511696941/PhonePe/Yes Bank /PhonePe		341.00	3369.60	159
23-08-2021		UPI/P2M/123511770717/AMAZON/Axis Bank/You are	569.00		2800.60	159
23-08-2021		UPI/P2M/123516287655/AMAZON/Axis Bank/You are	1073.00		1727.60	159
23-08-2021		UPI/P2M/123520856749/Flipkart/Yes Bank /UPI	783.00		944.60	159
24-08-2021		UPI/P2M/123613987365/AMAZON/Axis Bank/You are	599.00		345.60	159
24-08-2021		UPI/P2A/123615326200/Amazon Pa/Axis Bank/Refund		575.00	920.60	159
25-08-2021		UPI/P2A/123711179481/PhonePe/Yes Bank /PhonePe		399.00	1319.60	159
26-08-2021		UPI/P2M/123830530878/IRCTC App/Paytm Pay/Oid1000	121.80		1197.80	159
26-08-2021		UPI/P2M/123830670067/IRCTC App/Paytm Pay/Oid1000	106.80		1091.00	159
30-08-2021		UPI/P2M/124214693600/AMAZON/Axis Bank/You are	109.00		982.00	159
31-08-2021		UPI/P2M/124306102812/Google Pa/Axis Bank/Sold by	520.00		462.00	159

01-09-2021		UPI/P2A/124422430175/NIVEDITA /State Ban/Amazon		2000.00	2462.00	159
02-09-2021		UPI/P2M/124510826956/AMAZON/Axis Bank/You are	1075.00		1387.00	159
02-09-2021		UPI/P2M/124517408100/AMAZON/Axis Bank/You are	667.00		720.00	159
02-09-2021		UPI/P2A/124544133445/M N ANAN/State Ban/Netflix	200.00		520.00	159
03-09-2021		UPI/P2A/124611297037/NIVEDITA /State Ban/amazon		2000.00	2520.00	159
03-09-2021		UPI/P2M/124611694083/AMAZON/Axis Bank/You are	651.00		1869.00	159
03-09-2021		UPI/P2M/124622971067/AMAZON/Axis Bank/You are	599.00		1270.00	159
05-09-2021		UPI/P2M/124886975711/Google Pa/Axis Bank/Sold by	520.00		750.00	159
05-09-2021		UPI/P2A/124819482548/NIVEDITA /State Ban/amazon		2600.00	3350.00	159
05-09-2021		UPI/P2M/124820261236/AMAZON/Axis Bank/You are	2714.00		636.00	159
05-09-2021		UPI/P2M/124820191488/AMAZON/Axis Bank/You are	340.00		296.00	159
10-09-2021		UPI/P2A/125391153920/PRAVEEN /Canara Ba/UPI		1.00	297.00	159
10-09-2021		UPI/P2A/125394635083/PRAVEEN /Canara Ba/UPI		10000.00	10297.00	159
10-09-2021		UPI/P2A/125394642397/PRAVEEN /Canara Ba/UPI		5000.00	15297.00	159
10-09-2021		UPI/P2A/125346290896/PRAVEEN K/Bank of I/UPI		5000.00	20297.00	159
11-09-2021		UPI/P2M/125456725481/IRCTCRazo/ICICI Ban/IRCTC T	177.29		20119.71	159
11-09-2021		UPI/P2M/125456795301/IRCTCRazo/ICICI Ban/IRCTC T	207.29		19912.42	159
11-09-2021		UPI/P2A/125490249777/GOOGLEPAY/Axis Bank/Earned		4.00	19916.42	159
11-09-2021		UPI/P2M/125490270995/billdeskt/ICICI Ban/UPI	919.00		18997.42	159
11-09-2021		UPI/P2M/125456932470/IRCTCRazo/ICICI Ban/IRCTC T	207.29		18790.13	159
12-09-2021		UPI/P2M/125531242202/IRCTC App/Paytm Pay/Oid1000	156.80		18633.33	159
13-09-2021		UPI/P2M/125611725102/AMAZON/Axis Bank/You are	340.00		18293.33	159
14-09-2021		UPI/P2M/125748568272/Google Pa/Axis Bank/Sold by	260.00		18033.33	159
14-09-2021		UPIP2PREC/TCC103/125685649035/140921		207.29	18240.62	100
16-09-2021		UPI/P2M/125908904971/AMAZON/Axis Bank/You are	340.00		17900.62	159
16-09-2021		UPI/P2A/125985947204/Amazon Pa/Axis Bank/Refund		340.00	18240.62	159
17-09-2021		UPI/P2M/126011471300/Google Pa/Axis Bank/Sold by	890.00		17350.62	159
18-09-2021		UPI/P2M/126109588035/AMAZON/Axis Bank/You are	1613.00		15737.62	159
19-09-2021		UPI/P2M/126241021280/razorpay/ICICI Ban/Minimali	580.50		15157.12	159
20-09-2021		UPI/P2M/126361042361/Google Pa/Axis Bank/Sold by	520.00		14637.12	159
22-09-2021		UPI/P2M/126593536789/Google Pa/Axis Bank/Sold by	890.00		13747.12	159
23-09-2021		UPI/P2M/126619967277/HEALTHIFY/INDUSIN D /UPI	7854.00		5893.12	159
23-09-2021		UPI/P2A/126619995130/GOOGLEPAY/Axis Bank/Earned		6.00	5899.12	159
27-09-2021		UPI/P2M/127074508095/Google Pa/Axis Bank/Sold by	890.00		5009.12	159
28-09-2021		MOB/TPFT/LALITHA C R/918010087721372	4800.00		209.12	159

01-10-2021		920010060690746:Int.Pd:01-07-2021 to 30-09-2021		78.00	287.12	159
06-10-2021		IMPS/P2A/127914328401/RANJITDH/FEDERALB/MoneyGra		30119.04	30406.16	159
09-10-2021		UPI/P2A/128216477659/VEENA MOH/Canara Ba/UIP	2370.00		28036.16	159
09-10-2021		UPI/P2M/128217229961/AMAZON/Axis Bank/You are	499.00		27537.16	159
09-10-2021		UPI/P2M/128217627328/AMAZON/Axis Bank/You are	7419.00		20118.16	159
09-10-2021		UPI/P2M/128221383908/Google Pa/Axis Bank/Sold by	890.00		19228.16	159
09-10-2021		UPI/P2M/128224374066/Google Pa/Axis Bank/Sold by	1800.00		17428.16	159
10-10-2021		UPI/P2M/128330261076/Google Pa/Axis Bank/Sold by	1800.00		15628.16	159
11-10-2021		UPI/P2A/128446938982/PRASADITA/State Ban/UIP	25.00		15603.16	159
11-10-2021		UPI/P2M/128449968638/Swiggy/Axis Bank/Swiggy O	1514.00		14089.16	159
12-10-2021		UPI/P2M/128566596130/VODAFONE /HSBC/UIP	1000.00		13089.16	159
14-10-2021		UPI/P2M/128711108274/AMAZON/Axis Bank/You are	329.00		12760.16	159
14-10-2021		UPI/P2M/128711924985/AMAZON/Axis Bank/You are	974.00		11786.16	159
<b>TRANSACTION TOTAL</b>			<b>166423.17</b>	<b>154090.33</b>		
<b>CLOSING BALANCE</b>					<b>11786.16</b>	

Unless the constituent notifies the bank immediately of any discrepancy found by him/her in this statement of Account, it will be taken that he/she has found the account correct.

The closing balance as shown/displayed includes not only the credit balance and / or overdraft limit, but also funds which are under clearing. It excludes the amount marked as lien, if any. Hence the closing balance displayed may not be the effective available balance. For any further clarifications, please contact the Branch.

We would like to reiterate that, as a policy, Axis Bank does not ask you to part with/disclose/revalidate of your iConnect passord,login id and debit card number through emails OR phone call Further,we would like to reiterate that Axis Bank shall not be liable for any losses arising from you sharing/disclosing of your login id, password and debit card number to anyone. Please co-operate by forwarding all such suspicious/spam emails, if received by you, to customer.service@axisbank.com

With effect from 1st August 2016, the replacement charges for Debit card and ATM card applicable on Current accounts have been revised. To know more about the applicable charges,please visit [www.axisbank.com](http://www.axisbank.com)

REGISTERED OFFICE - AXIS BANK LTD,TRISHUL,Opp. Samartheswar Temple, Near Law Garden, Ellisbridge, Ahmedabad . 380006.This is a system generated output and requires no signature.

#### Legends :

ICONN - Transaction trough Internet Banking

VMT-ICON - Visa Money Transfer through Internet Banking

AUTOSWEEP - Transfer to linked fixed deposit

REV SWEEP - Interest on Linked fixed Deposit

SWEEP TRF - Transfer from Linked Fixed Deposit / Account

VMT - Visa Money Transfer through ATM

CWDR - Cash Withdrawal through ATM

PUR - POS purchase

TIP/ SCG - Surcharge on usage of debit card at pumps/railway ticket purchase or hotel tips

RATE.DIFF - Difference in rates on usage of card internationally

CLG - Cheque Clearing Transaction

EDC - Credit transaction through EDC Machine

SETU - Seamless electronic fund transfer through AXIS Bank

Int.pd - Interest paid to customer

Int.Coll - Interest collected from the customer



ഭാരത സർക്കാർ  
GOVERNMENT OF INDIA



നിവേദിത എൽ രവീന്ദ്രൻ  
Nivedita L Raveendran

അച്ഛൻ : ഡോ കെ രവീന്ദ്രൻ  
Father : Dr K RAVEENDRAN

ജനന വർഷം/Year of Birth: 1987  
സ്ത്രീ / Female

8281 4077 1869



ആധാർ - സാധാരണക്കാരന്റെ അവകാശം



**STATEMENT OF MARKS**

**No. TT 363594B**

**Name** NIVEDITA L RAVEENDRAN **Index No.** T/2153/025  
**of** SREEPURAM ENG. MED. H. SCH. & JR. COLL., KANNUR

**SUBJECTS**

**External Examination**

**PERCENTAGE MARKS**

ENGLISH	78	SEVEN EIGHT
MALAYALAM	95	NINE FIVE
HISTORY CIVICS & GEOGRAPHY (HCS-A, GEO-B)	95	NINE FIVE
MATHEMATICS	86	EIGHT SIX
SCIENCE (PHY-C, CHE-A, BIO-B)	80	EIGHT ZERO
COMPUTER SCIENCE	97	NINE SEVEN

**GRADE**

**Internal Assessment**

**SUPW & COMMUNITY SERVICE**

A

**Date of Birth** 29.07.1987

**RESULT — PASS CERTIFICATE AWARDED**

- Note** 1. The pass mark for each subject is 35%  
2. No divisions are awarded.

*(See Overleaf)*

Chief Executive & Secretary

COUNCIL FOR THE INDIAN SCHOOL CERTIFICATE EXAMINATIONS, NEW DELHI  
INDIAN SCHOOL CERTIFICATE EXAMINATION 2005

No. BG1436173



STATEMENT OF MARKS

Name NIVEDITA L RAVEENDRAN

Index No. B/8485/001

of SREEPURAM ENG. MED. H. SCH. & JR. COLL., KANNUR

SUBJECTS

External Examination

ENGLISH  
MATHEMATICS  
PHYSICS  
CHEMISTRY  
BIOLOGY  
COMPUTER SCIENCE

PERCENTAGE MARKS

86 EIGHT SIX  
51 FIVE ONE  
62 SIX TWO  
76 SEVEN SIX  
88 EIGHT EIGHT  
86 EIGHT SIX

Internal Assessment

SUPW & COMMUNITY SERVICE


GRADE

A

RESULT - PASS CERTIFICATE AWARDED

- Note : 1. The pass mark for each subject is 40%  
2. No divisions are awarded.

(See Overleaf)

  
Chief Executive & Secretary



# KANNUR UNIVERSITY



## FACULTY OF SCIENCE

Whereas it has been certified by duly appointed Examiners that

**NIVEDITA L RAVEENDRAN**

is qualified to receive the Degree of Bachelor of Science  
she having passed and been placed

in 1 Class in Part I English

in 1 Class in Part II Second Language (Malayalam) and

in 1 Class in Part III Optional Subjects (Pattern I)

Physics Main and

Mathematics and Chemistry Subsidiaries

at the Examinations held in April - 2007, April - 2007, March - 2008 respectively.

Register Number and Year (Part I) - 5594, April - 2007

Register Number and Year (Part II) - 5594, April - 2007

Register Number and Year (Part III) - 5594, March - 2008

The Syndicate of Kannur University hereby confers on her the Degree of

## Bachelor of Science

With all the Rights, Privileges and Honours thereunto appertaining.

Given under the seal of the University.



*Trichy*

VICE-CHANCELLOR

Kannur University

Date 31 May 2010

Nº 022118



பாரதியார் பல்கலைக் கழகம்  
Bharathiar University

அறிவியல் புலம்

FACULTY OF SCIENCE

பாரதியார் பல்கலைக் கழகம்

இயற்பியல்

தேர்ச்சி

அறிவியல் நிறைஞர்

பாரதியார் பல்கலைக் கழக ஆட்சிக்குழு

ஏப்ரல் 2010 ஆம்

நிவேதித்தா ல ரவீந்தரன்,

தகுதியடைந்திருப்பதாக,

என்னும் பட்டத்தினை

வழங்குகின்றது.

ஆண்டு

முதல்

சான்றளித்ததை

ஆழக

நடத்திய

வகுப்பில்

ஏற்று,

இலச்சினைபுடன்,

The Syndicate of the Bharathiar University hereby makes known that **NIVEDITA L RAVEENDRAN** has been admitted to the Degree of **MASTER OF SCIENCE**, having been certified by duly appointed Examiners to be qualified to receive the same in **PHYSICS** and was placed in the **FIRST** Class, at the Examination conducted in **APRIL 2010** by Bharathiar University.

Given under the Seal of the University.

கொயம்புத்தூர்  
Coimbatore  
நாள்

K. G. Senthil Kumar

தேர்வாளையர்

Dated: 15th July 2010

Controller of Examinations

ISSUED ON 14 JUN 2011



பதிவாளர்

Registrar

Vice-Chancellor

குணசைவேந்தர்

C No 279886



**பாரதியார் பல்கலைக் கழகம்**  
**Bharathiar University**

அறிவியல் பிலஸ்

**FACULTY OF SCIENCE**

பாரதியார் பல்கலைக் கழகத்தால்:

தேர்வுத்தர்ப்பாளர் ரவீந்திரன்.

சான்றிதழ் பெரிசில்

உறுதுறை

பாரதியார் பல்கலைக் கழக ஆட்சிக்குழு வழங்குகிறது.

முடிவுரை

2018-ஆம் ஆண்டு, செப்டம்பர் 7-ஆம்

தேதியில்

பட்டிப்பறி

பட்டிப்பறி

அங்கீகரிக்கப்பட்ட

முறையில்

பெற்ற

பட்டிப்பறி

செய்த

பயிற்சியில்

சான்றிதழ்த்தர்ப்பாளர்

இருந்தார்.

The Syndicate of the Bharathiar University hereby makes known that NIVEDITA L RAVEENDRAN has been admitted to the Degree of DOCTOR OF PHILOSOPHY in PHYSICS, having been certified by duly appointed Examiners to be qualified to receive the same on 7th SEPTEMBER 2018.



Given under the Seal of the University.



Bharathiar University  
Coimbatore  
Tamil Nadu

*(Signature)*  
Controller of Examinations (C/Ex)

Dated 25th February 2019 Controller of Examinations (C/Ex)

*(Signature)*  
Registrar (R/Ex)

Registrar (R/Ex)

*(Signature)*  
Vice-Chancellor

Vice-Chancellor

# NIVEDITA L. RAVEENDRAN

niveditalrc@gmail.com; nivedita\_lr@outlook.com

Google Scholar: [bit.ly/2M5q4IQ](https://scholar.google.com/citations?user=2M5q4IQ) Research Gate: [bit.ly/38PKob6](https://www.researchgate.net/profile/Nivedita-Lalitha-Raveendran)

LinkedIN: <https://www.linkedin.com/in/nivedita-lalitha-raveendran/>

ResearcherID: ABA-6192-2021; ORCID ID: 0000-0002-4373-3912

## PERSONAL INFORMATION

DOB: 29/07/1987

SEX: Female

Phone: +91-8940334911

Nationality: Indian



## RESEARCH INTERESTS

Single/multilayer metal, metal alloy and metal oxide thin film synthesis and characterization; synthesis and characterization of nanomaterials; 2D materials for microelectronics; enhancement of magnetostriction in galphenol thin films; fabrication and property analysis studies in multicomponent alloy systems; swift heavy ion and low energy ion irradiation of thin films, their structure-property correlation studies and interfacial mixing and other effects.

## EDUCATION

**Ph.D. in Physics | Department of Physics, Bharathiar University | September 2018**

Dissertation: *Growth, Characterization, and Ion Irradiation Effects on Magnetic and Magnetostrictive Properties of Galphenol (FeGa) Thin Films*

Advisor: Prof. R. T. Rajendra Kumar

**P.G. Diploma in Computer Applications | Department of Computer Sciences, Bharathiar University | December 2010 | 70%**

**M.Sc. in Physics | Department of Physics, Bharathiar University | April 2010 | 5.02 out of 6**

Thesis: *Effect of Substitution of Sn on the Structural and Magnetic Properties of  $\text{SmCo}_{6.8-x}\text{Sn}_x\text{Zr}_{0.2}$  ( $x = 0.1$  &  $0.3$ ) Nanostructured Metastable Alloys*

**B.Sc. in Physics | Department of Physics, Kannur University | June 2008 | 90%**

## PROFESSIONAL EXPERIENCE

**Staff Researcher | Centre for Advanced Materials, Aaivalayam-Dynamic Integrated Research Academy & Corporations (ADIRAC) | March 2020 – current**

- Consult on research projects at ADIRAC and help master and PhD students with their respective projects while exploring new projects and proposal preparation for funding.
- A book chapter in press (CRC Press) on MXenes: Preparation, properties and applications
- A manuscript is in pipeline for structural and PL studies of  $\text{Eu}^{3+}$  and  $\text{Yb}^{3+}$  doped CdS nanoparticles

**Online Tutor | Tutor Pixie and TeacherOn | April 2020 – current**

- Helps students of high school, junior college and bachelors with their academic curriculum and individual requirement
- Students from USA, Sweden, India, UAE and China

**Postdoctoral Research Associate | Center for Advanced Materials Research, University of Texas at El Paso | January 2019 – January 2020**

- Researching on structural and physical properties of MoGa thin films as thermal contacts for  $\text{Ga}_2\text{O}_3$ .
- Researching on Nb as ohmic/Schottky contact for  $\text{Ga}_2\text{O}_3$  thin films.

- Investigating Nb based high entropy alloy thin films physical properties such as wear and corrosion resistance for high-temperature applications.
- The preliminary results show that the resistivity of the Nb and MoGa thin films is comparable to that of other state-of-the-art materials used for the same application.
- A manuscript published on substrate temperature effects on Nb thin films.
- A manuscript published on the alginate based ZnO nanoparticle scaffolds for wound healing.
- A manuscript is in pipeline for substrate temperature and pressure dependent effects on MoGa thin films.
- Responsible for managing the lab, materials and supplies as well as helping the undergraduate, M.S., and Ph.D. students with their respective project tasks.
- Guided an undergraduate student from the University of California Santa Barbara and co-authored a poster for the COURI symposium.

**Guest Lecturer | Sree Narayana College, Kannur, Kerala | August 2010 – December 2010**

- Taught advanced quantum mechanics and electrodynamics to postgraduate students during the 2010-2011 academic year. *12 out of the 15 students in class scored more than 85% in their finals while the rest of them scored more than 70%.*
- Taught basic electronics, optics, and solid-state physics to undergraduate students during the 2010-2011 academic year. *90% of the students passed their finals.*
- Planned and conducted various practical experiments concerning the curriculum.
- Supervised B.S. Project work for the final semester students.

**Teaching Assistant | Bharathiar University | July 2013 – December 2013**

- Taught spectroscopy to postgraduate students in the Department of Nanoscience and Technology, Bharathiar University, during my doctoral studies. *100 % pass percentage for a class of 20.*
- Taught basic electronics and energy resources as supportive subjects to postgraduate students, Department of Physics of Bharathiar University, during my doctoral studies. *100 % pass percentage for a class of 30.*

**PROFESSIONAL DEVELOPMENT**

1. Crash Course on Python (MOOC from Coursera)  
Provided by Google  
Instructor: Ms. Christine Rafla, Systems administrator, Google
2. Programming for Everybody (Getting started with python) (MOOC from Coursera)  
Provided by University of Michigan  
Instructor: Prof. Charles Russell Severance, Clinical professor, School of Information
3. Python data structures (MOOC from Coursera)  
Provided by University of Michigan  
Instructor: Prof. Charles Russell Severance, Clinical professor, School of Information
4. Python for data science (MOOC from NPTEL)  
Provided by Indian Institute of Technology, Madras  
Instructor: Prof. Ragnathan Rengasamy, Department of Chemical Engineering

**RESEARCH EXPERIENCE**

**Center for Advanced Materials Research | University of Texas at El Paso | Postdoctoral Research Associate | January 2019 – January 2020**

*Low resistivity values obtained for both Nb and MoGa thin films.*

As the post-doctoral research associate at the center, I was part of several research projects including fabrication of metal and metal alloy thin films and their characterization for use as Schottky and ohmic contacts for oxide semiconductors like Ga<sub>2</sub>O<sub>3</sub>. Investigations on Nb and MoGa thin films fabricated by RF magnetron sputtering were carried out. The objective of the project was to study the structural, morphological, optical and electrical properties of the thin films and to determine if modifying the fabrication conditions could improve their properties. Fabrication and detailed study of

Nb based high entropy alloy for high temperature applications was also explored and this project is still underway. I was also part of a project which deals with alginate based ZnO nanoparticle scaffolds for wound healing applications and I was responsible for the preparation and characterization of the nanoparticles.

**Inter University Accelerator Center (IUAC), New Delhi & Bharathiar University, Coimbatore**  
**Doctoral researcher and University Grants Commission – IUAC Junior Research Fellow | April 2012 – September 2015**

*Influence of Swift Heavy Irradiation on the Structural and Magnetic Properties of Galfenol ( $Fe_{1-x}Ga_x$ ) Thin Films*

*Enhanced magnetic anisotropy up to 16 times that of the pristine thin films via ion irradiation, attained.*

In this work, galfenol (FeGa) thin films were synthesized by direct current magnetron sputtering and pulsed laser deposition methods. The effect of different parameters on the growth and properties of these thin films was also studied. These films were subjected to post-deposition ion irradiation (Ag and O ions) and ion implantation (Co and N ions) and the effect of irradiation on the structural, morphological, and magnetic properties was investigated. Moreover, inherent magnetic anisotropy and coercivity of the films play a major role in enhancing or deteriorating the magnetostriction constant of the films along with other constituents like structural phases and morphology. Ion irradiation and implantation were carried out to modify the magnetic anisotropy with the objective to increase the magnetostriction constant. Both Ag and O ion irradiation enhanced the magnetic properties of FeGa thin films. The Ag and O irradiation enhanced the magnetic anisotropy energy of the film deposited to 11 and 16 times, respectively, from the value of the pristine thin film. Since magnetostriction, an important property required for several functional magnetic materials applications, is correlated to magnetic anisotropy, a detailed analysis of the low energy ion irradiation and swift heavy ion irradiation is of ultimate significance in material property modification and device fabrication.

**Defence Metallurgical Research Laboratory (DMRL), Hyderabad | November 2009 – February 2010 | M.S. Project work: Advanced Magnetics Groups, DMRL**

*Effect of Substitution of Sn on the Structural and Magnetic Properties of  $SmCo_{6.8-x}Sn_xZr_{0.2}$  ( $x = 0.1$  &  $0.3$ ) Nanostructured Metastable Alloys*

*Higher stability and magnetization obtained after Sn substitution.*

Sn substituted SmCoZr alloys were melt spun to form ribbons and substitution effects on the structural and magnetic properties of the as prepared ribbons are investigated.

**Indian Institute of Science, Bangalore | April 2009 – July 2009**

Summer Intern/Indian Academy of Sciences Fellow | *Studying Spin Systems*

Theoretical understanding of different spin systems in materials.

## **AWARDS AND ACHIEVEMENTS**

**Newton International Fellowship | September 2018**

One of fifteen recipients funded by the Royal Society, U.K. and the Science and Engineering Board of India. Did not accept the award to start as a postdoctoral research associate at the University of Texas at El Paso.

**Best Poster Award by Royal Society of Chemistry Sustainable Energy & Fuels | February 2017**

*Ni-Zn Ferrite/Graphene Oxide Composites as Effective As & Pb Adsorbent for Water* presented at the International Conference on Nano for Energy and Water (NEW 2017).

### **Junior Research Fellow of University Grants Commission | April 2012 – September 2015**

Fellow of the University Grants Commission – Inter University Accelerator Center Project, Department of Physics, Bharathiar University.

### **Research Student Conference Fund Award by Institute of Physics (IOP) | July 2015**

Awarded a travel grant to attend the International Conference on Materials for Advanced Technologies (ICMAT) by the IOP Thin Films and Surfaces Group, Institute of Physics, London.

### **Best Paper Award at the National Conference on Recent Advances in Magnetic Materials & Applications | January 2010**

*Effect of Substitution of Sn on the Structural and Magnetic Properties of  $\text{SmCo}_{6.8-x}\text{Sn}_x\text{Zr}_{0.2}$  ( $X = 0.1$  &  $0.3$ ) Nanostructured Metastable Alloys* presented at the National Conference on Recent Advances in Magnetic Materials & Applications (MAGMA 2010).

### **Summer Research Fellow of the Indian Academy of Sciences | April 2009 – July 2009**

Recipient of this research fellowship, jointly sponsored by the Indian Academy of Sciences, the Indian National Science Academy and the National Academy of Sciences, India.

## **PUBLICATIONS**

1. **L. R. Nivedita**, Avery Haubert, Anil K. Battu and C. V. Ramana, “Correlation between Crystal Structure, Surface/Interface Microstructure and Electrical Properties of Nanocrystalline Niobium Thin Films”, *Nanomaterials*, 10, 1287, (2020). DOI: 10.3390/nano10071287
2. Cleetus CM, Alvarez Primo F, Fregoso G, **L. R. Nivedita**, Noveron JC, Spencer CT, Ramana CV, Joddar B. Alginate Hydrogels with Embedded ZnO Nanoparticles for Wound Healing Therapy. *International Journal of Nanomedicine*, 15, 5097-5111, (2020) DOI: 10.2147/IJN.S255937
3. C.R. Minitha, **L.R. Nivedita**, K. Asokan and R.T. Rajendra Kumar, “Tuning the Electrical Properties of Graphene oxide by Nitrogen Ion Implantation: Implication for Gas Sensing”, *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 450, 257–261, (2019). DOI: 10.1016/j.nimb.2018.12.044
4. D. Ranjith Kumar, K.S. Ranjith, **L. R. Nivedita**, K. Asokan, R. T. Rajendra Kumar, “Swift Heavy Ion Induced Effects on Structural, Optical and Photo-catalytic Properties of Ag Irradiated Vertically Aligned ZnO Nanorod Arrays”, *Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms*, 450, 95–99, (2019). DOI: 10.1016/j.nimb.2018.03.015
5. **L. R. Nivedita**, P. Manivel, R. Pandian, S. Murugesan, N. A. Morley, K. Asokan, R. T. Rajendra Kumar, “Enhancement of magnetostrictive properties of Galfenol thin films”, *Journal of Magnetism and Magnetic Materials*, 451, 300–304, (2018). DOI: 10.1016/j.jmmm.2017.11.030
6. D. Ranjith Kumar, K. S. Ranjith, **L. R. Nivedita**, R. T. Rajendra Kumar, “Effect of Sm Doping on the Structural, Optical and Magnetic Properties of Vertically Aligned ZnO Nanorod Arrays”, *Journal of Rare Earths*, 35 (10), 1002, (2017). DOI: 10.1016/S1002-0721(17)61005-6
7. K. S. Ranjith, **L. R. Nivedita**, K. Asokan, K. Satheesh, R. Pandian, M. Kamruddin, D. K. Avasthi, and R. T. Rajendra Kumar, “Robust water repellent ZnO nanorod array by Swift Heavy Ion Irradiation: Effect of Electronic Excitation Induced Local Chemical State Modification”, *Scientific Reports*, 7, 3251, (2017)<sup>1</sup>. DOI: 10.1038/s41598-017-03313-8
8. **L. R. Nivedita**, Ramanathaswamy Pandian, S. Murugesan, K. Asokan, R.T. Rajendra Kumar, “Phase evolution and magnetic properties of DC sputtered Fe-Ga (Galfenol) thin films with growth temperatures”, *Journal of Alloys and Compounds*, 704, 420 – 424, (2017). DOI: 10.1016/j.jallcom.2017.01.276
9. **L. R. Nivedita**, V. V. Siva Kumar, K. Asokan, R. T. Rajendrakumar, “Growth and Magnetic Properties of RF Sputtered Fe-Ga Thin Films”, *Materials Research*, 18(5), 946-952, (2015). DOI: 10.1590/1516-1439.349014

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<sup>1</sup> Both the first and second authors have made equal contributions in conducting the experiments, characterizations and writing the manuscript.

10. V. Vignesh, **L. R. Nivedita**, R. Nirmala, R. T. Rajendrakumar, R. Navamathan, "Deposition and Characterization of Cuprous Oxide Thin Films by Direct Current Magnetron Sputtering", *Advanced Science, Engineering and Medicine*, 7(11), 990-994, (2015). DOI: 10.1166/ asem.2015.1801

### **Publications in Pipeline / Under Review**

1. **L. R. Nivedita**, K. S. Ranjith, P. Manoravi, M. Joseph, R. Pandian, Nicola A. Morley, V. Raghavendra Reddy, K. Asokan, R. T. Rajendrakumar, "Laser power density induced tunable magnetic properties of Galfenol (FeGa) thin films by Pulsed Laser Deposition" (Submitted)
2. M. R. Kumar, **L. R. Nivedita**, M. A. Semkin, F. Bibi Mary, D. Sathish Chander, J. Sophia Ponraj "Structural and photoluminescence studies of Eu<sup>3+</sup> and Yb<sup>3+</sup> doped CdS nanoparticles prepared by precipitation method" (Submitted)
3. **L.R. Nivedita**, K.S. Ranjith, K. Asokan, R. T. Rajendra Kumar, "Oxygen ion irradiation induced magnetic property tuning in FeGa (Galfenol) thin films" (in pipeline)

### **Book Chapter**

1. F. Bibi Mary, J. S. Ponraj, L.R. Nivedita, M. R. Kumar, D. Sathish Chander, "Introduction: MXene –A novel two-dimensional material: Preparation, properties, and applications" (Book Chapter - MXene Filled Polymer Nanocomposites, CRC Press) (In Press) (2021)

### **ORAL AND POSTER PRESENTATIONS**

**Co-authored the presentation at the Campus of Undergraduate Research Initiatives (COURI) symposium 2019 at UTEP**

*Effect of Processing Conditions on the Structure, Morphology and Electrical Properties of Nanocrystalline Niobium Thin Films*

University of Texas at El Paso (UTEP), USA | August 2019

**Presented at the 4<sup>th</sup> International Conference on Nano Structuring by Ion Beam (ICNIB 2017)**

*Tailoring the magnetic properties of FeGa (Galfenol) thin films by 100 MeV Oxygen ion irradiation*  
Devi Ahilya University, Indore, India | October 2017.

**Presented at the International Conference on Advanced Materials Science & Technology (ICAMST 2017)**

*Influence of growth temperature on the magnetic and structural properties of FeGa thin films*  
Bannari Amman Institute of Technology, Sathyamangalam, India | August 2017.

**Presented at the International Conference on Nano for Energy and Water (NEW 2017)**

*Ni-Zn Ferrite/Graphene Oxide Composites as Effective As & Pb Adsorbent for Water*  
University of Petroleum and Energy Studies (UPES), Dehradun, India | February 2017.

**Presented at the International Conference of Young Researchers on Advanced Materials (IUMRS-ICYRAM 2016)**

*Influence of Ar Partial Pressure on the Magnetic Properties of DC Sputtered FeGa Alloy Thin Films*  
Indian Institute of Science Bangalore, India | December 2016.

**Presented at the International Conference on Materials for Advanced Technologies (ICMAT 2015 & IUMRS-ICA 2015), Suntec Singapore**

*Electrical and Magnetic Behaviour of Ni-Zn Ferrite/Graphene Oxide Composites*  
Materials Research Society, Singapore | July 2015.

**Presented at the International Conference on Magnetic Materials and Applications (ICMAGMA 2014)**

*Synthesis and Magnetic Properties of Solvothermal Synthesized Ni-Zn Ferrites: Photocatalytic Studies in Visible Light*

Pondicherry University, India | September 2014.

**Presented at the International Conference on "Chemistry – Frontiers and Challenges."**

*Substrate effects on the Structural, Optical and Magnetic Properties of Fe Based Thin Films Prepared by RF Magnetron Sputtering*



PSGR Krishnammal College for Women, Coimbatore | February 2014

**Presented at the National Conference on Recent Advances in Magnetic Materials & Applications (MAGMA 2010)**

*Effect of Substitution of Sn on the Structural and Magnetic Properties of  $\text{SmCo}_{6.8-x}\text{Sn}_x\text{Zr}_{0.2}$  ( $x = 0.1$  &  $0.3$ ) Nanostructured Metastable Alloys*

Thiagarajar College of Engineering, Madurai | January 2010.

**EXHIBITIONS ATTENDED**

**I3 Expo – National Level exhibition on Ideas, Inventions and Innovations | September 2013**

Presented a working model for purification of water by dye degradation using ZnO nanorod coated glass tubings.

**WORKSHOPS ORGANIZED**

**UTEP-EURO one-day workshop | March 2019**

Organized and conducted the **UTEP-EURO one-day workshop** on Materials, Biomaterials & Smart Sensors/Transportation at University of Texas at El Paso on March 8<sup>th</sup>, 2019.

**TRAINING AND WORKSHOPS ATTENDED**

**Indian Institute of Science Education and Research (IISER), Pune | November 2017**

Participated in the “Women in Science Journalism” workshop, organized by IISER, Pune, and Newton – Bhabha funds.

**Bharathiar University, Coimbatore | April 2016**

Participated in the “Materials Studio” training.

**Bharathiar University, Coimbatore | September 2014**

Participated in the “Immobilization of Enzymes with Nanomaterials for Industrial Applications” training course.

**PSG Institute of Advanced Studies, Coimbatore | October 2013**

Attended a two-day workshop on “Nanofabrication Technologies – 2013”. The Indian Nanoelectronics Users Program, Indian Institute of Technology, Bombay and PSG Institute of Advanced studies organized this event.

**SKILLS & COLLABORATIONS**

*Material Synthesis – Physical methods:*

PLD, Sputtering, evaporation, e-beam

*Material Synthesis – Chemical methods:*

sol-gel, hydro/solvothermal, coprecipitation, CVD

*Material Characterization*

SEM, AFM, XRD, UV-NIR spectroscopy, spectroscopic ellipsometry, contact angle measurement system, VSM, MOKE, four probe for electrical property measurement, carrier mobility and concentration by hall measurement system

*Software’s handling for Data Interpretation/Coding*

ORIGIN PRO (Plotting graphs), SRIM/TRIM (interaction of ions with matter), C++, Python, Geant4 (simulation toolkit basics – continues to explore)

*Active Collaborations*

IUAC, New Delhi; UGC-DAE CSR, Indore; IGCAR, Kalpakkam; DMRL, Hyderabad and University of Sheffield, U.K.

**ACADEMIC SERVICE**

**American Physical Society (APS) | Early career member | 2019, 2020, 2021**

### **Magnetic Society of India (MSI) | Life Member**

Actively participates in the conferences organized by MSI and in the interactions during the general body meeting of MSI, conducted at the venues of the International Conference on Magnetic Materials and Applications (ICMAGMA).

### **Solar Energy, a peer-reviewed journal from Elsevier Publications – Reviewer | 2018, 2020**

**Journal of Magnetism and Magnetic Materials (JMMM), a peer-reviewed journal from Elsevier Publications – Reviewer | 2020**

### **Innovation in Science Pursuit for Inspired Research Science Camp – Invited Delegate | December 2017**

Program launched by the Indian Union government's Department of Science and Technology. Interacted with high school students as an invited delegate to attract them to follow advanced studies and research towards careers in science, technology, engineering, and math fields.

### **Vasan Institute of Ophthalmology and Research – External Examiner | March 2016 & March 2017**

Conducted and supervised the semester laboratory examination as the external examiner and conducted viva – voce examination.

### **Institute of Physics – Associate Member | 2014 – 2016**

## **COMMUNITY SERVICE**

### **Kerala Floods “Kaikorth Kannur”: Volunteer | August 2018**

Delivered food and other necessary amenities to the people affected by floods in the city of Kannur.

### **Art of Living: Volunteer | 2005 – Present**

Responsible for creating awareness about education and sanitation in rural villages in India.

### **National Cadet Corps – Cadet Under Officer | July 2006 – March 2008**

Part of the youth wing of Armed forces during my undergraduate studies. Attended training camps at many places in India and was part of constructing housing, roads, and sanitation. Organized and led cadets from the colleges affiliated to Kannur Battalion in awareness marches and meetings about women empowerment and HIV/AIDS prevention.

### **CanKids...KidsCan | 2012**

Donated my hair to kids with cancer.

### **The Organisation for Industrial, Spiritual and Cultural Advancement (OISCA) – International: Volunteer | 2003 – 2008, 2020**

Helped to organize workshops in local schools and colleges for creating awareness about the importance of preserving local vegetation and crops. Also, I was a member of the team that planted local tree saplings for afforestation. Currently, part of the women's forum, Kannur

**Nivedita L. Raveendran**  
**16/10/2021**