



**Proceedings of the  
Annual Session of  
Jaffna Science Association  
(1991 - 2012)**

**Article index**

Compiled by  
**V. Prabhahar**  
**K. Chandrasekar**

**Jaffna Science Association  
Jaffna, Sri Lanka.**

**2014**



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Annual Sessions of  
**Jaffna Science Association**  
**(1991 - 2012)**

## **Article index**

Compiled by

**V. Prabhahar**

*Librarian,*

*Jaffna Public Library, Jaffna.*

**K. Chandrasekar**

*Senior Assistant Librarian,*

*Library, University of Jaffna, Jaffna.*

**Jaffna Science Association**  
**Jaffna, Sri Lanka.**

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## Preface

In the latter part of the 20<sup>th</sup> century, the field of science has showed notable developments, along with the arrival of new technological equipments and tools. Hence, the present era is called as *information age*. Moreover, information is considered as one of the basic resources in the world today. This has paved the way for the information to be brought out to the world and passed around.

In this context, library catalogue, book classification, bibliographies and indexes serve an important function of providing required information to the reader, in a timely and preferred manner. This index is prepared for the articles in the ***Proceedings of the Annual Sessions of Jaffna Science Association*** published during the period 1991 – 2012. Totally, 137 scholarly articles written in wide range of subject areas are indexed in this compilation. We hope that this index would cater the information needs of the academics, scholars, researchers, and the students of the higher educational institutions in specific, and public in general.

Mr. V. Prabhahar  
Dr (Mrs.) K.Chandrasekar  
25.03.2014

## **List of JSA Proceedings**

- Proceedings of Jaffna Science Association – 1991  
Proceedings of Jaffna Science Association – 1992  
Proceedings of Jaffna Science Association – 1993  
Proceedings of Jaffna Science Association – 1994  
Proceedings of Jaffna Science Association – 1995  
Proceedings of Jaffna Science Association – 1997  
Proceedings of Jaffna Science Association – 1998  
Proceedings of Jaffna Science Association – 1999 (*Vol. 7, No.2*)  
Proceedings of Jaffna Science Association – 2000 (*Vol. 8, No.2*)  
Proceedings of Jaffna Science Association – 2001 (*Vol. 9, No.2*)  
Proceedings of Jaffna Science Association – 2002 (*Vol. 10, No.2*)  
Proceedings of Jaffna Science Association – 2003 (*Vol. 11, No.2*)  
Proceedings of Jaffna Science Association – 2004 (*Vol. 12, No.2*)  
Proceedings of Jaffna Science Association – 2005 (*Vol. 13, No.2*)  
Proceedings of Jaffna Science Association – 2006 (*Vol. 14, No.2*)  
Proceedings of Jaffna Science Association – 2008 (*Vol. 15, No.2*)  
Proceedings of Jaffna Science Association – 2009 (*Vol. 16, No.2*)  
Proceedings of Jaffna Science Association – 2010 (*Vol. 17, No.2*)  
Proceedings of Jaffna Science Association – 2011 (*Vol. 18, No.2*)  
Proceedings of Jaffna Science Association – 2012 (*Vol. 19, No.2*)

## Guide to Reader

This index for the *Proceedings of the Annual Sessions of Jaffna Science Association* (published during the period 1991 – 2012) is intended to serve as an important bibliographical tool for scholars and researchers. The major components of this index are:

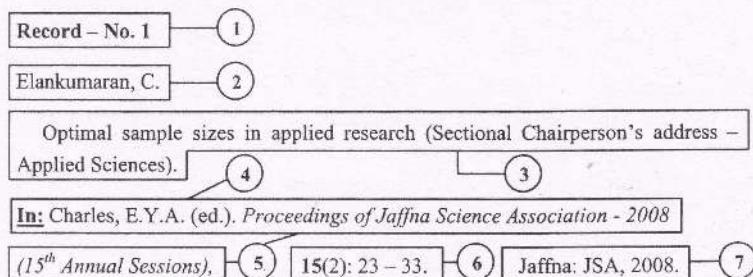
- 1) Subject headings
- 2) Arrangement of index entries
- 3) Author index
- 4) Title index
- 5) Subject Index

### Subject headings

Subject headings are helpful in understanding the subject classification of this index.

### Arrangement of index entries

This is the main section of this index. A unique classification is done. Index entries for 137 articles are classified under eight main subject headings and further categorized according to relevant sub-headings and sub-sub-headings. A sample index entry format is given below:



In the index entry, type of presentation is mentioned within the brackets along with the title of the article. Further, title of the proceedings is given in italics. Apart from that, volume number is in bold, and issue number is illustrated within circular brackets and in simple case.

Next to this main section, three indexes are provided to facilitate the quick access to the index entries.

#### **Author index**

Names of the authors of the articles are arranged in alphabetical order and indicated with respective record numbers.

#### **Title index**

Titles of the articles are arranged in alphabetical order and indicated with respective record numbers.

#### **Subject index**

Subject headings are arranged in alphabetical order and indicated with respective record numbers, in order to facilitate the subject/keyword search.

## **Abbreviations used**

Editor	ed.
Jaffna Science Association	JSA

## **Subject Headings**

- 1. Research**
- 2. Social sciences**
  - 2.1. Sociology
  - 2.2. Political science
  - 2.3. Economics
    - 2.3.1 Economic development & growth
      - 2.3.1.1 Sustainable development
  - 2.4. Social problems & services
    - 2.4.1. Social welfare
    - 2.4.2. Environmental problems & protection
      - 2.4.2.1. Sanitation
      - 2.4.2.2. Global warming
      - 2.4.2.3. Climate change
      - 2.4.2.4. Energy crisis
      - 2.4.2.5. Natural disasters
  - 2.5. Education
    - 2.5.1. Teaching & Learning
    - 2.5.2. Higher education
    - 2.5.3. Tertiary education
  - 3. Natural sciences**
    - 3.1. Mathematics
    - 3.2. Astronomy
    - 3.3. Physics
    - 3.4. Chemistry
    - 3.5. Zoology
  - 4. Applied sciences**
    - 4.1. Medicine & Health
      - 4.1.1. Health care
      - 4.1.2. Medical education
      - 4.1.3. Food & Nutrition
      - 4.1.4. Therapeutics
      - 4.1.5. Diseases
        - 4.1.5.1. Communicable diseases
          - a) Malaria
        - 4.1.5.2. Non - Communicable diseases
      - 4.1.6. Gynaecology & Obstetrics
    - 4.2. Agriculture
    - 4.3. Fisheries
    - 4.4. Advanced technologies
      - 4.4.1. Biotechnology
      - 4.4.2. Information communication technology
      - 4.4.3. Nanotechnology
  - 5. Language & Literature**
  - 6. Geography**
  - 7. History & Archaeology**
  - 8. Others**

## **Arrangement of index entries**

### **1. Research**

#### **Record – No. 1**

Elankumaran, C.

Optimal sample sizes in applied research (Sectional Chairperson's address – Applied Sciences). **In:** Charles, E.Y.A. (ed.). *Proceedings of Jaffna Science Association – 2008 (15<sup>th</sup> Annual Sessions)*, 15(2): 23 – 33. Jaffna: JSA, 2009.

#### **Record – No. 2**

Elankumaran, C.

Some methodological issues in applied research projects (Sectional Chairperson's address – Applied Sciences). **In:** Mahesan, R. (ed.). *Proceedings of Jaffna Science Association – 2006 (14<sup>th</sup> Annual Sessions)*, 14(2): 19 – 28. Jaffna: JSA, 2008.

#### **Record – No. 3**

Kandasamy, K.

Research and identifying research problem (Presidential address). **In:** Mahesan, R. (ed.). *Proceedings of Jaffna Science Association – 2006 (14<sup>th</sup> Annual Sessions)*, 14(2): 1 – 6. Jaffna: JSA, 2008.

### **2. Social sciences**

#### **2.1. Sociology**

#### **Record – No. 4**

மனோநிதிரன், கோ.

நெருக்கமான உரவுகளை உருவாக்கி வளர்ப்பதில் ஏற்படும் பிரச்சினைகள் (Popular lecture). **In:** Kugabalan, K. (ed.). *Proceedings of Jaffna Science Association – 2002 (10<sup>th</sup> Annual Sessions)*, 10(2): 157 – 163. Jaffna: JSA, 2003.

#### **2.2. Political science**

#### **Record – No. 5**

Balakrishnan, N.

Some issues of a divided polity in Sri Lanka (Presidential address). **In:** Rajendram, G.F. (ed.). *Proceedings of Jaffna Science Association – 1992*, pp.1 – 21. Jaffna: JSA, 1993.

#### **Record – No. 6**

Nathan, S.K.S.

System analysis in politics (Sectional Chairperson's address – Social Sciences). **In:** Mahesan, R. (ed.). *Proceedings of Jaffna Science Association – 1995*, pp. 53 – 58. Jaffna: JSA, 1997.

### Record – No. 7

Nathan, S.K.S.

12<sup>th</sup> Lok Sabha elections (Review lecture). In: Arasaratnam, V. (ed.). *Proceedings of Jaffna Science Association – 1998*, pp. 63 – 64. Jaffna: JSA, 1999.

### Record – No. 8

Ragunathan, K.

Power sharing arrangement: a democratic perspective (Sectional Chairperson's address - Social Sciences). In: Mahesan, R. (ed.). *Proceedings of Jaffna Science Association – 2006 (14<sup>th</sup> Annual Sessions)*, 14(2): 33 – 38. Jaffna: JSA, 2008.

## **2.3. Economics**

### Record – No. 9

Balakrishnan, N.

Investing in people – economic and social dimensions (Review lecture). In: Kandasamy, K. (ed.) *Proceedings of Jaffna Science Association – 1994*, pp. 44 – 54. Jaffna: JSA, 1995.

### Record – No. 10

Navaratnarajah, V.

Development strategy and technology for developing countries (Sectional Chairperson's address – Applied Sciences). In: Rajendram, G.F. (ed.). *Proceedings of Jaffna Science Association – 1992*, pp. 22 – 37. Jaffna: JSA, 1993.

### Record – No. 11

Santhirasegaram, S.

Political regimes and economic growth: a review of literature (Sectional Chairperson's address – Social Sciences). In: Elankumaran, C. (ed.). *Proceedings of Jaffna Science Association – 2010 (17<sup>th</sup> Annual Sessions)*, 17(2): 33 – 38. Jaffna: JSA, 2011.

### Record – No. 12

Sivanathan, V.P.

Trends and prospects of Jaffna's economy (Sectional Chairperson's address - Social Sciences). In: Ramesh, S. (ed.). *Proceedings of Jaffna Science Association – 2001 (9<sup>th</sup> Annual Sessions)*, 9(2): 57 – 74. Jaffna: JSA, 2002.

### **2.3.1. Economic development & growth**

### Record – No. 13

உதயகுமார், எஸ்.எஸ்.

யற்பான மாவட்டத்தில் கைத்தொழில் அபிவிருத்திக்கான வாய்ப்புக்கள் (Sectional Chairperson's address – Social Sciences). Thabotharan, K. (ed.). *Proceedings of Jaffna Science Association – 2011 (18<sup>th</sup> Annual Sessions)*, 18(2): 26 – 36. Jaffna: JSA, 2012.

### **2.3.1.1. Sustainable development**

#### **Record – No. 14**

Jayasingam, T.

Nature is the best working capital for sustainable development of North East, Sri Lanka (Popular lecture). **In:** Thabotharan, K. (ed.). *Proceedings of Jaffna Science Association – 2011 (18<sup>th</sup> Annual Sessions)*, 18(2): 37 – 40. Jaffna: JSA, 2012.

#### **Record – No. 15**

Rajeshkannan, R.

Role of social empowerment in sustainable development (Theme seminar). **In:** Thabotharan, K. (ed.). *Proceedings of Jaffna Science Association – 2011 (18<sup>th</sup> Annual Sessions)*, 18(2): 60 – 63. Jaffna: JSA, 2012.

#### **Record – No. 16**

Sivarajah, N.

Role of public health sector in sustainable development of the region (Theme seminar). **In:** Thabotharan, K. (ed.). *Proceedings of Jaffna Science Association – 2011 (18<sup>th</sup> Annual Sessions)*, 18(2): 55 – 59. Jaffna: JSA, 2012.

#### **Record – No. 17**

இராந்திரநாதன், எஸ்.

பிரதேசத்தின் பேண்டகுபயிலிற்குமில் கல்வித்துறையின் வகிபாகம் (Theme seminar). Thabotharan, K. (ed.). *Proceedings of Jaffna Science Association – 2011 (18<sup>th</sup> Annual Sessions)*, 18(2): 64. Jaffna: JSA, 2012.

### **2.4. Social problems & services**

#### **2.4.1. Social welfare**

#### **Record – No. 18**

Arulanantham, S.

Economic welfare (Theme Seminar). **In:** Sivapalan, S. (ed.). *Proceedings of Jaffna Science Association – 2005 (13<sup>th</sup> Annual Sessions)*, 13(2): 7 – 11. Jaffna: JSA, 2006.

#### **Record – No. 19**

Lukumar, P.

Health and social welfare: aiming towards future (Theme seminar). **In:** Sivapalan, S. (ed.). *Proceedings of Jaffna Science Association – 2005 (13<sup>th</sup> Annual Sessions)*, 13(2): 15 – 18. Jaffna: JSA, 2006.

#### **Record – No. 20**

Mahendran, K.

Cultural welfare (Theme Seminar). **In:** Sivapalan, S. (ed.). *Proceedings of Jaffna Science Association – 2005 (13<sup>th</sup> Annual Sessions)*, 13(2): 12 – 14. Jaffna: JSA, 2006.

### **Record – No. 21**

Shanmugalingam, N.

Development and modernization – a sociological analysis (Sectional Chairperson's address – Social Sciences). In: Mahesan, R. (ed.). *Proceedings of Jaffna Science Association – 1997*, pp. 53 – 59. Jaffna: JSA, 1998.

### **2.4.2. Environmental problems & protection**

#### **Record – No. 22**

Gnanavelrajah, N.

Impact of agricultural practices on environment (Theme seminar). In: Kugabalan, K. (ed.). *Proceedings of Jaffna Science Association – 2002 (10<sup>th</sup> Annual Sessions)*, 10(2): 164 – 178. Jaffna: JSA, 2003.

#### **Record – No. 23**

Mikunthan, G.

Marching towards "Another green revolution" (Sectional Chairperson's address – Applied sciences). In: Charles, E.Y.A. (ed.). *Proceedings of Jaffna Science Association – 2009 (16<sup>th</sup> Annual Sessions)*, 16(2): 45 – 55. Jaffna: JSA, 2010.

#### **2.4.2.1. Sanitation**

##### **Record – No. 24**

Senthilnanthan, M.

Constructed wetlands for low-cost wastewater treatment (Sectional Chairperson's address – Pure sciences). In: Thabotharan, K. (ed.). *Proceedings of Jaffna Science Association – 2011 (18<sup>th</sup> Annual Sessions)*, 18(2): 8 – 15. Jaffna: JSA, 2012.

##### **Record – No. 25**

Sivapalan, K.

Environmental sanitation – an experience at Mallavi (Review lecture). In: Sivachandran, R. (ed.). *Proceedings of Jaffna Science Association – 2003 (11<sup>th</sup> Annual Sessions)*, 11(2): 68 – 74. Jaffna: JSA, 2004.

#### **2.4.2.2. Global warming**

##### **Record – No. 26**

Gnanavelrajah, N.

Agriculture, land degradation, global warming: links and options for mitigation (Popular lecture). In: Charles, E.Y.A. (ed.). *Proceedings of Jaffna Science Association – 2009 (16<sup>th</sup> Annual Sessions)*, 16(2): 5 – 15. Jaffna: JSA, 2010.

### Record – No. 27

Sivachandiran, S.

Global warming and climate changes (Sectional Chairperson's address – Applied Sciences). In: Sivachandran, R. (ed.). *Proceedings of Jaffna Science Association – 2003 (11<sup>th</sup> Annual Sessions)*, 11(2): 51 – 57. Jaffna: JSA, 2004.

### **2.4.2.3. Climate change**

#### Record – No. 28

Mikunthan, G.

Climate change on agriculture: challenges, adaptation and mitigation (Presidential address). In: Thabotharan, K. (ed.). *Proceedings of Jaffna Science Association – 2011 (18<sup>th</sup> Annual Sessions)*, 18(2): 1 – 7. Jaffna: JSA, 2012.

#### Record – No. 29

Ramasamy, R. and Surendran, S.N.

Impact of climate change and salinization on vector mosquitoes – an overview with special reference to the Jaffna peninsula (Theme seminar). In: Sarveswaran, K. (ed.). *Proceedings of Jaffna Science Association – 2012 (19<sup>th</sup> Annual Sessions)*, 19(2): 24 – 28. Jaffna: JSA, 2013.

#### Record – No. 30

Ravindran, S.

Agnihotra homa and climate change (Sectional Chairperson's address – Social Sciences). In: Sarveswaran, K. (ed.). *Proceedings of Jaffna Science Association – 2012 (19<sup>th</sup> Annual Sessions)*, 19(2): 16 – 23. Jaffna: JSA, 2013.

#### Record – No. 31

Senthilnanthan, M.

Environmental impacts of climate change: key issues & mitigating efforts (Theme seminar). In: Sarveswaran, K. (ed.). *Proceedings of Jaffna Science Association – 2012 (19<sup>th</sup> Annual Sessions)*, 19(2): 29 – 33. Jaffna: JSA, 2013.

#### Record – No. 32

நித்திலவர்னன், ஆ.

காலங்கிலை மாற்றமும், சமூக-பொருளாதார துறைகளில் அதன் நாக்கமும் (Theme seminar). In: Sarveswaran, K. (ed.). *Proceedings of Jaffna Science Association – 2012 (19<sup>th</sup> Annual Sessions)*, 19(2): 34 – 35. Jaffna: JSA, 2013.

### **2.4.2.4. Energy crisis**

#### Record – No. 33

Kumaravadivel, R.

The Sri Lankan energy crisis (Presidential address). In: Sivachandran, R. (ed.). *Proceedings of Jaffna Science Association – 2003 (11<sup>th</sup> Annual Sessions)*, 11(2): 1 – 33. Jaffna: JSA, 2004.

#### Record – No. 34

Ravirajan, P.

Solar cells: the most appropriate alternative energy source for the electricity needs of Jaffna Peninsula (Popular lecture). In: Mahesan, R. (ed.). *Proceedings of Jaffna Science Association – 2006 (14<sup>th</sup> Annual Sessions)*, 14(2): 45 – 50. Jaffna: JSA, 2008.

#### Record – No. 35

சிவசந்திரன், இரா.

இலங்கைபின் வடக்ம் மாகாணத்தில் மாற்றுச் சக்தி வளங்கள்: ஒரு புவியியல் ஞாக்கு (Sectional Chairperson's address – Social Sciences). Kugabalan, K. (ed.). *Proceedings of Jaffna Science Association – 2002 (10<sup>th</sup> Annual Sessions)*, 10(2): 86 – 106. Jaffna: JSA, 2003.

### **2.4.2.5. Natural disasters**

#### Record – No. 36

Balachandiran, S.

Disturbances of tropical cyclones in Sri Lanka: a case study of 1978 cyclone (Sectional Chairperson's address – Social Sciences). In: Kandasamy, K. (ed.). *Proceedings of Jaffna Science Association – 1994*, pp. 31 – 43. Jaffna: JSA, 1995.

#### Record – No. 37

Kumaravadivel, R.

The physics of Tsunamis (Review lecture). In: Sivapalan, S. (ed.). *Proceedings of Jaffna Science Association – 2005 (13<sup>th</sup> Annual Sessions)*, 13(2): 44 – 57. Jaffna: JSA, 2006.

### **2.5. Education**

#### Record – No. 38

Mageswaran, S.

Performance of the students in the G.C.E. Ordinary level, G.C.E. Advanced level and undergraduate examinations (Presidential address). In: Kandasamy, K. (ed.). *Proceedings of Jaffna Science Association – 1994*, pp. 69 – 116. Jaffna: JSA, 1995.

#### Record – No. 39

Panchalingam, A.

A review of current general education reforms (Presidential address). In: Kugabalan, K. (ed.). *Proceedings of Jaffna Science Association – 2002 (10<sup>th</sup> Annual Sessions)*, 10(2): 1 – 21. Jaffna: JSA, 2003.

#### Record – No. 40

Sinnathamby, K.

School level evaluation as an index to academic achievement (Review lecture). In: Sivayogan, N. (ed.). *Proceedings of Jaffna Science Association – 1999 (7<sup>th</sup> Annual Sessions)*, 7(2): 82 – 99. Jaffna: JSA, 2000.

### Record – No. 41

Sivagnanasundram, C.

Undergraduate research in the University of Jaffna (Presidential address). **In:** Krishnarajah, S. (ed.). *Proceedings of Jaffna Science Association – 1993*, pp. 23 – 50. Jaffna: JSA, 1994.

### Record – No. 42

தனபலன், பா.

பிள்ளைப்பராயத்தினருக்கான கல்வித்தேவைகள் (Educational needs for the childhood) (Theme seminar). **In:** Charles, E.Y.A. (ed.). *Proceedings of Jaffna Science Association – 2008 (15<sup>th</sup> Annual Sessions)*, 15(2): 4 – 8. Jaffna: JSA, 2009.

### Record – No. 43

பஞ்சாலிங்கம், அ.

பாடசாலை மட்டக் கணிப்பிடி – ஒர் நோக்கு (Sectional Chairperson's address – Pure Sciences). Ramesh, S. (ed.) *Proceedings of Jaffna Science Association – 2001 (9<sup>th</sup> Annual Sessions)*, 9(2): 32 – 39. Jaffna: JSA, 2002.

## 2.5.1. Teaching & Learning

### Record – No. 44

Bavani, G.

Problem based learning (Presidential address). **In:** Sarveswaran, K. (ed.). *Proceedings of Jaffna Science Association – 2012 (19<sup>th</sup> Annual Sessions)*, 19(2): 43 – 44. Jaffna: JSA, 2013.

### Record – No. 45

Mahesan, S.

Paradoxes – a learning tool (Sectional Chairperson's address – Applied Sciences). **In:** Mahesan, R. (ed.). *Proceedings of Jaffna Science Association – 1997*, pp. 27 – 37. Jaffna: JSA, 1998.

### Record – No. 46

Raveendranathan, R.

Factors influencing the equilibrium of concept formation with special reference to the G.C.E (A/L) physics learning by Jaffna students (Sectional Chairperson's address – Pure Sciences). **In:** Sivachandran, R. (ed.). *Proceedings of Jaffna Science Association – 2003 (11<sup>th</sup> Annual Sessions)*, 11(2): 34 – 50. Jaffna: JSA, 2004.

### Record – No. 47

Sinnathamby, K.

Learning through project work – an overview with particular reference to senior secondary classes in the Jaffna schools (Sectional Chairperson's address – Social Sciences). **In:** Arulvel, K.K. (ed.). *Proceedings of Jaffna Science Association – 2000 (8<sup>th</sup> Annual Sessions)*, 8(2): 73 – 88. Jaffna: JSA, 2001.

#### Record – No. 48

Sivayohan, N.

Some simple models for learning and teaching physics (Sectional Chairperson's address – Pure Sciences). **In:** Sivayogan, N. (ed.). *Proceedings of Jaffna Science Association – 1999 (7<sup>th</sup> Annual Sessions)*, 7(2): 12 – 35. Jaffna: JSA, 2000.

### **2.5.2. Higher education**

#### Record – No. 49

Balasundarampillai, P.

Higher education in Sri Lanka: an overview (Presidential address) **In:** Sivayogan, N. (ed.). *Proceedings of Jaffna Science Association – 1999 (7<sup>th</sup> Annual Sessions)*, 7(2): 1 – 11. Jaffna: JSA, 2000.

#### Record – No. 50

Sinnathamby, M.

New trends in higher education (Popular lecture). **In:** Charles, E.Y.A. (ed.) *Proceedings of Jaffna Science Association – 2009 (16<sup>th</sup> Annual Sessions)*, 16(2): 29 – 36. Jaffna: JSA, 2010.

### **2.5.3. Tertiary education**

#### Record – No. 51

Kumaravadivel, R.

Challenges in tertiary education (Theme seminar). **In:** Visakaruban, K. (ed.). *Proceedings of Jaffna Science Association – 2004 (12<sup>th</sup> Annual Sessions)*, 12(2): 97 – 104. Jaffna: JSA, 2005.

#### Record – No. 52

Navaratnarajah, V.

Technical and vocational education in perspective (Presidential address). **In:** Mahesan, R. (ed.) *Proceedings of Jaffna Science Association – 1995*, pp. 1 – 20. Jaffna: JSA, 1997.

#### Record – No. 53

Sanmugadas, A.

Challenges in tertiary education: social sciences (Theme seminar). **In:** Visakaruban, K. (ed.). *Proceedings of Jaffna Science Association – 2004 (12<sup>th</sup> Annual Sessions)*, 12(2): 105 – 108. Jaffna: JSA, 2005.

#### Record – No. 54

Thurairajah, A.

Tertiary education in development (Presidential address). **In:** Rajendram, G.F. *Proceedings of Jaffna Science Association – 1991*, pp. 1 – 23. Jaffna: JSA, 1992.

### 3. Natural sciences

#### Record – No. 55

Ganesalingam, V.K.

Science and society (Presidential address). In: Arasaratnam, V. (ed.) *Proceedings of Jaffna Science Association – 1998*, pp. 1 – 21. Jaffna: JSA, 1998.

#### Record – No. 56

Kumaravadivel, R.

Science and peace – the challenges ahead (Theme seminar). In: Sivachandran, R. (ed.). *Proceedings of Jaffna Science Association – 2003 (11<sup>th</sup> Annual Sessions)*, 11(2): 75 – 84. Jaffna: JSA, 2004.

#### Record – No. 57

Thillainathan, M.

Achieving peace through scientific techniques (Theme seminar). In: Sivachandran, R. (ed.). *Proceedings of Jaffna Science Association – 2003 (11<sup>th</sup> Annual Sessions)*, 11(2): 97 – 103. Jaffna: JSA, 2004.

## 3.1. Mathematics

#### Record – No. 58

Mahesan, S.

Statistics – for non-statisticians (Sectional Chairperson's address – Applied Sciences). In: Mahesan, R. (ed.). *Proceedings of Jaffna Science Association – 1995*, pp. 21 – 51. Jaffna: JSA, 1997.

#### Record – No. 59

Srisatkunarajah, S.

The beauty and magic of numbers (Presidential address). In: Elankumaran, C. (ed.). *Proceedings of Jaffna Science Association – 2010 (17<sup>th</sup> Annual Sessions)*, 17(2): 39 – 50. Jaffna: JSA, 2011.

## 3.2. Astronomy

#### Record – No. 60

Kandasamy, K.

Stellar evolution (Sectional Chairperson's address – Pure Sciences). In: Mahesan, R. (ed.). *Proceedings of Jaffna Science Association – 1997*, pp. 13 – 26. Jaffna: JSA, 1998.

### **3.3. Physics**

#### **Record – No. 61**

Sivayogan, N.

Physics and philosophy of Albert Einstein (Sectional Chairperson's address – Pure Sciences). **In:** Mahesan, R (ed.). *Proceedings of Jaffna Science Association – 2006 (14<sup>th</sup> Annual Sessions)*, 14(2): 7 – 18. Jaffna: JSA, 2008.

#### **Record – No. 62**

Sivayogan, N.

Understanding chaos (Sectional Chairperson's address – Pure Sciences). **In:** Sivapalan, S. (ed.). *Proceedings of Jaffna Science Association – 2005 (13<sup>th</sup> Annual Sessions)*, 13(2): 19 – 32. Jaffna: JSA, 2006.

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#### **Record – No. 63**

Mageswaran, R.

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#### **Record – No. 64**

Ganesalingam, V.K.

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Kuganathan, S.

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Kunanadam, V.

Cerebrospinal fluid circulation revisited (Review lecture). **In:** Arasaratnam, V. (ed.). *Proceedings of Jaffna Science Association – 1998*, pp. 59 – 62. Jaffna: JSA, 1999.

## 4. Applied sciences

### Record – No. 67

Hoole, S.R.H.

Device design optimization: the merging of physics, computer science and mathematics (Popular lecture). In: Thabotharan, K. (ed.). *Proceedings of Jaffna Science Association – 2011 (18<sup>th</sup> Annual Sessions)*, 18(2): 41 – 50. Jaffna: JSA, 2012.

### Record – No. 68

Kumaravadivel, R.

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### Record – No. 69

Navaratnarajah, V.

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Navaratnarajah, V.

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### Record – No. 71

Arasaratnam, V.

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Kandasamy, K.

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Lukumar, P.

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### Record – No. 74

Sivagnanasundram, C.

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### Record – No. 75

Rajendraprasad, R.

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### Record – No. 76

Rajeshkannan, N.

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Sivanesan, K.

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### Record – No. 78

Sivapalan, K.

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Sivapalan, K.

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Arulmozhi, G.

Physical needs of children (Theme Seminar). In: Charles, E.Y.A. (ed.). *Proceedings of Jaffna Science Association – 2008 (15<sup>th</sup> Annual Sessions)*, 15(2): 1 – 3. Jaffna: JSA, 2009.

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**Record – No. 85**

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Parameswaran, S.V.

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#### Record – No. 88

Sivaganasundram, C.

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#### **4.1.3. Food & Nutrition**

##### Record – No. 89

Arasaratnam, V.

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Ravimannan, N.

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##### Record – No. 93

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Murugananthan, K.

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Sivarajah, N.

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##### Record – No. 104

Sivansuthan, S.

The metabolic syndrome, a public health risk – from a medical perspective (Popular lecture). In: Thabotharan, K. (ed.). *Proceedings of Jaffna Science Association – 2011 (18<sup>th</sup> Annual Sessions)*, 18(2): 52 – 54. Jaffna: JSA, 2012.

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Sivasuriya, M.

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Rajadurai, S.

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Gnanavelrajah, N.

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Kuganathan, S.

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Vinobaba, P.

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##### **4.4.1. Biotechnology**

**Record – No. 117**

Arasaratnam, V.

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Balasubramaniam, K.

An overview of the biotechnology research on starch based products at the University of Jaffna (Review lecture). **In:** Kandasamy, K. (ed.). *Proceedings of Jaffna Science Association – 1994*, pp. 55 – 68. Jaffna: JSA, 1995.

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Sevvél, P.

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##### **Record – No. 121**

Mahesan, S.

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##### **Record – No. 123**

Ravirajan, P.

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### **5. Language & Literature**

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##### **Record – No. 125**

Sammugadas, A.

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### **6. Geography**

##### **Record – No. 126**

Kugabalan, K.

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### Record – No. 127

இராஜேஸ்வரன், எஸ்.ரி.பி.

இலங்கை மற்றும் “அடம்ஸ்” பாலம் (இராமர் அணை) மீதான புலிசரித வெளியூரவு, நியில் சார்ந்த விளைவு நிலை (Geo-hydro implication on Adams bridge and Sri Lanka) (Popular lecture). In: Sivachandran, R. (ed.). *Proceedings of Jaffna Science Association – 2003 (11<sup>th</sup> Annual Sessions)*, 11(2): 104 – 127. Jaffna: JSA, 2004.

### Record – No. 128

இராஜேஸ்வரன், எஸ்.ரி.பி.

மாழிப்பாணப் பிரதேசத்தில் காணப்படும் செம்மன். மற்றும் கடற்கரையோர மணற்பாடுகள்: தோற்றும், ஏறவல், பொருளாதார முக்கியத்துவம். பிரச்சினைகள் பற்றிய ஒர் புவியியல் நோக்கு (Sectional Chairperson's address – Social Sciences). In: Visakaraban, K. (ed.). *Proceedings of Jaffna Science Association – 2004 (12<sup>th</sup> Annual Sessions)*, 12(2): 65 – 88. Jaffna: JSA, 2005.

### Record – No. 129

குசௌ, ஏ.என்.

சேது சமுத்திரக் கால்வாய்த் திட்டமும், இலங்கையில் அதன் தாக்கமும் (Popular lecture). In: Sivapalan, S. (ed.). *Proceedings of Jaffna Science Association – 2005 (13<sup>th</sup> Annual Sessions)*, 13(2): 58 – 61. Jaffna: JSA, 2006.

## 7. History & Archaeology

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Pushparatnam, P.

Naka dynasty as gleaned from the archaeological evidences in Sri Lanka (Review lecture). In: Kugabalan, K. (ed.). *Proceedings of Jaffna Science Association – 2002 (10<sup>th</sup> Annual Sessions)*, 10(2): 107 – 145. Jaffna: JSA, 2003.

### Record – No. 131

Sitrampalam, S.K.

Proto-historic Sri Lanka – a retrospect (Review lecture). In: Ramesh, S. (ed.). *Proceedings of Jaffna Science Association – 2001 (9<sup>th</sup> Annual Sessions)*, 9(2): 75 – 106. Jaffna: JSA, 2002.

### Record – No. 132

Sitrampalam, S.K.

Tamils in early Sri Lanka: a historical perspective (Sectional Chairperson's address – Social Sciences). In: Krishnarajah, S. (ed.). *Proceedings of Jaffna Science Association – 1993*, pp. 51 – 88. Jaffna: JSA, 1994.

## 8. Others

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Baddin, C.

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Chandrasekar, K.

Informatics: an emerging discipline of the information age (Sectional Chairperson's address – Applied Sciences). In: Sarveswaran, K. (ed.). *Proceedings of Jaffna Science Association – 2012 (19<sup>th</sup> Annual Sessions)*, 19(2): 4 – 11. Jaffna: JSA, 2013.

### Record – No. 135

Ganeshamoorthy, R.

The mind (Popular lecture). In: Mahesan, R. (ed.). *Proceedings of Jaffna Science Association – 2006 (14<sup>th</sup> Annual Sessions)*, 14(2): 51 – 52. Jaffna: JSA, 2008.

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Sanmugadas, A.

Role of media in popularization of science (Presidential address). In: Sivapalan, S. (ed.). *Proceedings of Jaffna Science Association – 2005 (13<sup>th</sup> Annual Sessions)*, 13(2): 1 – 6. Jaffna: JSA, 2006.

### Record – No. 137

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