#### **RESUME**

**1. Name:** A. Anil Kumar

**Academic Rank:** Professor (Full Time)

### 2. Education:

| Indian Institute of Science, Bangalore    | Physics | Ph.D.1978  |
|---|---------|------------|
| Indian Institute of Technology, New Delhi | Physics | M.Sc. 1973 |
| Osmania University, Hyderabad, India      | Physics | B.Sc. 1971 |

# 3. Academic Experience:

| J. Academic Expenence. |   |  |
|------------------------|---|--|
| 1996-preser            | nt Professor, Department of ECE, Prairie View A&M University      |  |
| 2001-2011              | Department Head, Physics  |  |
| 2001-2003              | Associate Dean, College of Arts & Sciences                        |  |
| 1998-2001              | Director of Research & Special Assistant to the President for     |  |
|                        | Science & Technology  |  |
| 1997-1998              | Associate Dean for Research, College of Engineering               |  |
| 1989-1996              | Associate Professor, Electrical Engineering                       |  |
| 1986-1989              | Assistant Professor, Electrical Engineering                       |  |
| 1985-1986              | Visiting Lecturer, Electrical Engineering                         |  |
| 9/83-8/85              | Visiting Assistant Professor - Texas A&M University,              |  |
| 9/81-8/83              | Professional Associate, University of Manitoba, Canada            |  |
| 10/79-8/81             | Research Associate, Simon Fraser University, Canada               |  |
| 5/79-10/79             | Visiting Research Fellow, Electronic Structure In Solids Program, |  |
|                        | University de Liege, Belgium                                      |  |
| 2/78-5/79              | Research Fellow, University of Warwick, England, Physics          |  |

## 4. Non-Academic Experience:

- Based on a grant from the SBA (Small Business Administration), mentored small businesses on proposal development to SBIR (Small Business Innovation Research) and STTR (Small Business Technology Transfer Research) initiatives.
- Based on a grant from DOL (Department of Labor), explored the possibility of setting up business and technology incubators at HBCUs. Sponsored and conducted a national conference and a regional conference on this subject.

# **5. Certification and Professional Registration:** None.

## 6. Current Memberships in Professional Organizations:

- Member, Institute of Electrical and Electronics Engineers
- Member, AAAS (American Association for the Advancement of Science)

### 7. Honors and Awards (selected list):

- 1. 2012 Harmony Public Schools Public Servant Award (2012)
- 2. Recipient of the Thurgood Marshall College Fund's Outstanding Achievement Award for School Reform (2009)
- 3. One of five faculty members in the TAMU System to have received the Distinguished Achievement Award from the Board of Regents (2004)

## 8. Service Activities (within and outside of the institution)

- Chair, Engineering Dean Search Committee
- Member, NSF Review Panels (frequent)
- Member, international delegation of the Thurgood Marshall College Fund to China, Malaysia, Singapore and Ghana (2010, 2011, 2017)
- Member, Physics EOC (End Of Course) Standards Panel, Texas Education Agency
- Judge, I-SWEEP (International Sustainable World Project Olympiad (Energy, Engineering & Environment)
- Reviewer, Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST) Science Review Committee (2014)

#### 9. Publications and Presentations from the Last Five Years

- A.A. Kumar and E. M. Stoerkel, Shattering Fixed Mindsets Cultivating an Environment of Innovation, Presentation at the ME by SEA Conference, TAMU-Corpus Christi, June 2022
- 2. E.M. Stoerkel and A.A. Kumar, *Teaching to Make it Stick*, Presentation at the ME by SEA Conference, TAMU-Corpus Christi, June 2022
- A.A. Kumar, Promoting and Assessing Metacognition, Paper presented at 2022 ASEE Gulf Southwest Annual Conference, Prairie View, Texas. <a href="https://peer.asee.org/39200">https://peer.asee.org/39200</a>
- 4. E.M. Stoerkel, J. R. Valles & A. A. Kumar, *Employing a Scaffolding Technique* to Facilitate Deeper Learning, Presentation at the ME by SEA Conference, TAMU-Corpus Christi, June 2018
- 5. J.R. Valles, E.M. Stoerkel & A.A. Kumar, Fluid Thinking with Euler's Formula, Presentation at the ME by SEA Conference, TAMU-Corpus Christi, June 2018
- 6. A. A. Kumar, From Standards to Competencies, Presentation at the ME by SEA Conference, TAMU-Corpus Christi, June 2017
- 7. A. Kumar, Biomimetics A New Discipline, Presentation at the ME by SEA Conference, TAMU-Corpus Christi, June 2017

**Software/Hardware Systems Developed: (i)** CSPIFF - Circuit Simulation Program In the Presence of Fatal Faults for reliability and fault-tolerance of large scale electronic systems; (ii) CSIM - Communication Systems Simulator for simulation of arbitrary communication systems; (iii) BCHS – Bone Conduction Headset – a novel communication system designed for NASA-JSC and demonstrated at NASA JSC Inspection Days '99.

**10. Professional Development Activities:** IEEE Houston Branch Meetings; Travelled to China, Malaysia and Singapore as a member of the Thurgood Marshall College Fund Delegation.