

## **Ed Nakauchi**

### **Senior EMC/EMI Technical Consultant**

#### **EDUCATION**

**MSEE:** Columbia Pacific University , San Rafael , California (1992). *Thesis - Techniques for Controlling Radiated Emissions Due to Common-Mode Noise in Electronic Data Processing Systems.*

**BSEE:** Northrop University , Inglewood , California , Magna Cum Laude, 1969 (3.89-4.00). *Graduated Class Valedictorian. Elected for inclusion 1969-1970 edition of Who's Who Among College Students in American Universities and Colleges. Member of Tau Beta Pi, National Engineering Honor Society. Student member of the IEEE.*

Associate of Arts in Electronic Technology: Orange Coast College , Costa Mesa , California (1964-66). *Graduated Salutatorian out of 1,000. Graduated also with Technician Certificate and won an award given by the Instrument Society of America for a technical paper.*

#### **AWARDS**

- Service awards from IEEE.
- Elected for inclusion for the 15<sup>th</sup> edition of Who's Who in California.
- Elected for the 22<sup>nd</sup> edition of Who's Who in the West.
- Mentor awards from UCI.

#### **PROFESSIONAL AFFILIATIONS**

- Senior member, past Chairman and Treasurer of IEEE S-27 EMC Chapter.
- Arrangements Chairman for the 1986 S. Ca. Regional EMC Conference
- 1992 IEEE EMC Symposium
- 1996 EMC Colloquium
- 1999 OC EMC Fest
- Session Co-Chairman on Filtering for the 2001 IEEE EMC Symposium.
- Member of the EOS/ESD Association.
- Member of Orange County Committee on EMF.
- NARTE Certified EMC and ESD Engineer.
- Certified Disaster Worker for the city of Huntington Beach , CA.
- Mentor for Science Technology Society sponsored by UCI.
- UCI Extension instructor for a course in EMI/EMC, PCB Design Control for EMI and Principles of Electrical Engineering.

#### **SEMINARS**

- Measurement Uncertainty Workshop presented by ANSI
- Bluetooth Seminar by 7 Layers
- NEBS Seminar by Elliott Labs

#### **BOOK**

Co-authored book titled Testing for EMC Compliance Approaches and Techniques, John Wiley & Sons, 2004.

#### **PATENTS**

- EMI Shielding Including a Lossy Medium
- Method and apparatus for EMI Shielding

## **TECHNICAL PAPERS/ARTICLES/PRESENTATIONS**

1. Presented paper titled "Static Discharge Problems on Data Processing Equipment" for the 1975 IEEE Symposium on EMC in San Antonio, Texas.
2. Presented paper titled "Predicting Switching Regulator Conducted and Radiated EMI" for the 1976 Power Conference in Beverly Hills, California.
3. Presented lecture to the IEEE Computer Society titled "EMI Constraints on Small Business Computer Designs" in June 1980.
4. Presented paper titled "Techniques for Controlling Radiated Emissions Due to Common-Mode Noise in Electronic Data Processing Systems" for the 1982 Symposium on EMC in Santa Clara, California.
5. Published article in EMC Technology magazine titled "Isolate Radiated Emission Problems Quickly" in July-September 1984 issue, Vol. 3. Publisher is Don White Consultants, Inc.
6. Presented paper titled "ESD on Systems" for the 1986 IEEE Regional Conference on EMC in Anaheim, California.
7. Presented lecture titled "EMI, EMC and EMP Considerations for Power Supplies" to the LA Chapter of the IEEE Magnetics Society, June 21, 1989.
8. Presented lecture titled "System Level ESD" at the 5<sup>th</sup> Annual EMC Expo 90 in San Mateo, California, October 1990.
9. Presented lecture to the San Diego Chapter of the IEEE EMC Society titled "ESD Effects on Systems" in February 1991.
10. Presented paper titled "Potential Interference Problems Between Wireless Products and Personal Computers" for the RF Expo/EMC International Show in San Diego, California on January 30, 1995.
11. Presented tutorial titled "Practical Filter Design Techniques and Pitfalls" for the 1995 High Frequency Power Conversion Conference in San Jose, California on May 9 & 10, 1995.
12. Presented paper titled "Potential Interference Problems Between Wireless Products and Personal Computers" for the 1995 IEEE International EMC Symposium in Atlanta, Georgia.
13. Organizer/Chairman and speaker for the 1996 Wescon Show in Anaheim, California of a session for EMC between communication devices and computers.
14. Published article in EC & M magazine titled "When is Ground Not Ground?" in October 1997 issue, Vol. 96 No.10. Publisher is Intertec Publishing Corporation.
15. Presented lecture to the LA and San Diego Chapters of the IEEE EMC Society titled "CASSPER: An innovative diagnostic tool for board, box, and system level EMI mitigation" on February 1998. This same presentation was also selected for presentation at the 1998 IEEE International EMC Symposium held in Denver, CO on August 1998.
16. Presented lecture to the Orange County and San Diego Chapters of the IEEE EMC Society titled "Innovative Pre-Compliance Test Methodology Using Ambient Cancellation and Coherence Detection Techniques". This same presentation was also selected for inclusion at the 1999 IEEE International EMC Symposium held in Seattle, WA on August 1999.
17. Published article in Evaluation Engineering magazine titled "Are You Prepared for the New Audio/Video EMC Standards" in the April 2000 issue, Vol. 39 No. 4. Publisher is Nelson Publishing, Inc.
18. Co-authored article in Evaluation Engineering magazine titled "EMI Shielding with Thermal Management" in the August 2001 issue, Vol. 40 No. 8. Publisher is Nelson Publishing, Inc.
19. Published article in Electronic Products magazine titled "The Complexities of Board-Level Shielding" in the March 2002 issue.
20. Published article in Portable Design magazine titled "Board-level shields can help in noisy environments" in the March 2003 issue.
21. Published article in Conformity 2004 Reference Guide titled "Mechanical Shielding Products".
22. Presented paper titled "Contact Surface Resistivity: Its Effect on Shielding Effectiveness" for the 2004 Symposium on EMC in Santa Clara, California.