

**Ralph V. Wilhelm, Jr., Ph.D.**  
**Curriculum Vitae**

## Professional Summary

Dr. Wilhelm has over forty years of industry experience in the automotive industry beginning his career at General Motors Research Laboratory, eventually holding positions of increasing responsibility with Delphi Delco Electronics Corporation, and currently running an automotive electronics consultancy. Dr. Wilhelm is familiar with automotive electronic component technology and the supply-line management required not only producing suitable automotive components, but supervising the R&D, advanced engineering, forward technology development, sales, and product line management process from OEM to customer. He has worked in various technical and leadership roles to develop new products and complex systems from invention to production using both internal invention/development and external partnerships to achieve world-class automotive systems worldwide. In 2001, Dr. Wilhelm founded and established an automotive electronics consultancy focused on automotive electronics suppliers doing business in North America. His firm, Wilhelm Associates ([www.wilhelmassoc.com](http://www.wilhelmassoc.com)) has supported suppliers whose “home” countries have included Japan, Taiwan, China, Korea, Canada, United States, Germany, and France as they do business in North America.

## Expertise

- Advanced Mobile Multi Media  
Automotive Systems
- Automotive Electrical & Electronic  
Systems
- Automotive ADAS, Safety Systems
- Design, Manufacturing &  
Distribution of Automotive  
Components
- Electric Vehicle components  
and systems
- Expert Witness in Automotive  
Electronics
- Human Machine Interface issues  
(HMI)  
for Automotive Electronics, displays,  
and Touch, Appearance, Lighting (TAL)  
devices
- Display Technology for Automotive  
Applications
- Integrated Circuits for Automotive  
Applications
- Navigation & Real Time Traffic  
Automotive applications
- Telematics
- Component and  
Sub-system development

**VALEO EXHIBIT 1023**  
***Valeo v. Magna***  
**IPR2015-\_\_\_\_\_**

# Education

<u>Year</u>	<u>College or University</u>	<u>Degree</u>
1985	University of Illinois	Executive Management Program
1987	University of Michigan	MBA, Operations & Strategy
1972	Rutgers University	Ph.D., Material Science/Ceramic Engineering
1967	Cornell University	B.S.E.E.

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## Professional Experience

From: 2001  
To: Present  
Organization: Wilhelm Associates, LLC (www.wilhelmassoc.com)  
Title: President/Founder  
Summary: Consulting firm concentrating in automotive electronics, telematics, infotainment, systems engineering, and data communications between systems and devices, product/market & international business strategies

- Developing and using methodologies for market assessment, requirements definition, product design, strategy, and implementation
- Firm includes five part-time highly experienced Senior Associates plus other individuals as needed to support customers as needed
- Diverse client base: Japanese, Taiwanese, Chinese, Korean, French, German, Canadian, & US based
- Executive coaching for international and high potential employees
- Expert Witness in Automotive Electronics

From: 1997  
To: 2001  
Organization: Delphi Delco Electronics Corporation  
Title: Product Line Manager, Mobile Multi Media for North America

- Summary:
- Reported to General Director of Mobile Multi Media
  - Responsible for all deliverables, from technology planning through sales, and
  - 
  - product strategies and to ensure on-time delivery of products within budget
  - Won \$2.2 Billion revenue of new business over 18 months, across three major product lines, and five separate OEM's. Customers are headquartered in Japan, Europe, and North America including GM, Ford, Toyota, and Honda.
  - Actual revenue over \$320 Million in CY2000.
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  - Typical programs are on a commercial cycle time of 6 to 15 months, spec to start-of-production with automotive high quality
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From: 1994  
To: 1997  
Organization: Delco Electronics Corporation (living and working out of Singapore)  
May 2014

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Title: Vice President of Engineering, Delco Electronics Asia Pacific (DEAP)

Summary:

- Reported to President of DEAP
- Responsible for all engineering design and deliverables for all Asia/Pacific
- 
- customers worldwide
  
- Business grew by 30% to 40% per year with revenue at ~\$250 Million in 1996,
- across six product lines, eight customers, and OEM facilities in six countries
- Responsible for application engineering and design centers in Asia/Pacific region.
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From: 1989

To: 1994

Organization: Delco Electronics Corp.

Title: Director of Advanced Development/Systems Integration

Summary:

- Reported to General Director of Engineering
- Responsible for all product development for \$5 Billion business, in seven departments covering integrated circuit fabrication through automotive safety and electronic systems
  
- Budget in 1994 was over \$50 Million with ~450 people world wide
  
- Developed new products now in production: forward looking radar, solid state YAW sensors, advanced airbag system electronics, head up displays, RDS audio for North America, IR-based night vision, and telematics

From: 1984

To: 1989

Organization: Delco Electronics Corp.

Title: Department Head, Advanced Instrumentation & Display

Summary: Reported to Chief Engineer, Instrumentation & Display

From: 1978

To: 1984

Organization: General Motors Corporation - AC Spark Plug Division Title:

May 2014

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Supervisor and Department Head – Materials Development Summary:  
Reported to Chief Engineer, Advanced Development

From: 1971  
To: 1978  
Organization: General Motors Research Laboratories  
Title: Senior Research Scientist

May 2014

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