# Yves OESCH

RF Design and EMC Consultant

+41 32 824 38 57

cv@yvesoesch.ch

Ch. des Ribaudes 11
2000 Neuchâtel
Switzerland

www.yvesoesch.ch


## SUMMARY


Passionate RF engineer. More than 20 years of industrial R&D experience. Specialized in very low power, low voltage and ultra miniaturized devices. Frequency range: DC – 10 GHz. Author or co-author of several patent families.


## EXPERIENCE

**2023 – …** **Freelance consulting**

- 50% Employee at Sonova Communications
- 50% Freelance consulting

**2021 – 2022** **Sonova communications, Team leader RF Design**

- People management
- Hiring of new team members, coaching of new engineers
- Workforce planning
- Budget
- RF equipment maintenance and calibration
- IP and EMC expertise

**2007 – 2021** **Phonak communications, Senior RF engineer**

- Antenna design (PIFA, patch, loop) for hearing instruments and handheld devices
- RF front-end design – PA / LNA / Switch / filters / matching (2.4 GHz, 20 dBm)
- Development of an UWB channel measurement system
- RF measurements
- RF certification of products
- Contribution different radio ASICS designs running Bluetooth, BLE and proprietary protocols
- Management of Innosuisse projects in collaboration with academic partners

**1999 – 2006** **Swatch group R&D, Development engineer**

- GPS watch prototype, including RF, IF and Baseband chipset
- Vehicle keyless entry with bidirectional communication

## EDUCATION

**1994 – 1999** **Bachelor/Master in electrical and electronic engineering EPFL**

Master thesis: Doppler direction finder for rescuing people at sea

# Yves OESCH

RF Design and EMC consultant

## GRANTED PATENTS (EP and US only)

| Title | Publication number | Publication date |
|---|---|---|
| Transmission system for a body-worn electronic device | US11342949 (B2) | 2021-08-26 |
| BTE hearing instrument comprising a loop antenna | US10804599 (B2) | 2020-03-19 |
| System and method for optimizing battery usage for a binaural hearing system | US10531205 (B1) | 2020-01-16 |
| BTE hearing instrument comprising an open-end transmission line antenna | US10764695 (B2) | 2020-01-09 |
| ITE hearing device | EP3588980 (B1) | 2020-01-01 |
| Hearing assistance system with automatic side detection | US10623871 (B2) | 2019-09-26 |
| Hearing assistance system | US10149074 (B2) | 2018-01-18 |
| Patch antenna integrated in a wristwatch | US7151496 (B2) | 2005-03-10 |
| Apparatus for wireless transmission of information and communication system comprising said apparatus | EP1420524 (B1) | 2004-05-19 |
| Radio receiver with means for correcting multipath effects and method | EP1265371 (B1) | 2002-12-11 |
| Radiofrequency signal receiver with means for improving the reception dynamic of said signals | US7092433 (B2) | 2002-11-14 |
| RF signal receiver with means to improve the dynamics of the reception of the signals | EP1255123 (B1) | 2002-11-06 |

## SKILLS

- ➔Antennas
- ➔EMI/EMC
- ➔PCB Sch/layout
- ➔EM Simulations
- ➔Signal integrity
- ➔RF measurements
- ➔System design
- ➔Power management
- ➔Portable devices
- ➔FCC part 15 & ETSI EN300328
- ➔Python & C

## LANGUAGES

French: Native  English : Proficient  German : Proficient  Swiss-german: Independent

## HOBBIES

Climbing, Sailing, Amateur Radio (callsign HB9DTX)

Strong interest for photovoltaics, energy transition, electrical load monitoring and optimization