

**DOUGLAS R. HENRY**  
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## **Objective**

To work in teaching or course development positions that will utilize my experience and knowledge of chemistry, biology, software development, and database management.

## **Education**

- Certificate in Online Teaching and Learning, CSUEastBay, Hayward, CA
- PhD Pharmaceutical Chemistry, Oregon State University, Corvallis, OR
- MS Pharmaceutical Chemistry, University of Colorado, Boulder, CO
- B. Phar., University of Colorado, Boulder, CO

## **Employment History**

- January 1984 through April 2005: Elsevier/MDL. Software development and research positions in projects for computational chemistry, chemical database management, reagent selection for combinatorial library design, middle-tier software for diverse data sources, and a large online scientific information search and discovery system. Last position: Advisory Scientist.
- September 1980 to January 1984: Postdoctoral research assistant, Department of Chemistry, Penn State University. Computer-aided chemistry, structure-activity relationships, and pattern recognition software development.
- Prior to 1980: Oregon State University School of Pharmacy and Department of Chemistry. Five years instructor and teaching assistant in courses for general chemistry, and pharmaceutical chemistry (analytical and organic medicinal). University of Colorado School of Pharmacy. Four years instructor and teaching assistant in courses for physical pharmaceutical chemistry, synthetic medicinal chemistry, and analytical pharmaceutical chemistry.

## **Skills and Qualifications**

- Laboratory and instructional experience in general, organic, physical, analytical, and computational chemistry. Excellent communication and delivery skills.
- Skilled programmer and software developer (C, C++, Java, jsp, Perl), markup languages and website development (HTML, XML, VRML, javascript), Oracle application languages (SQL/PLUS, PL/SQL). Familiar with common operating systems and development environments (Microsoft Windows, Solaris, Visual Studio, Borland JBuilder, Oracle Jdeveloper, linux, and .NET.)
- Proficient with statistical and data mining systems – PhD minor in applied statistics.
- Experienced developer of chemical and reaction database systems – Oracle and MDL proprietary databases.

**Accomplishments**

- Developed and maintained Reagent Selector product - including concordance as a chemical data warehouse. Received MDL Peacock Award for work on Reagent Selector.
- Led development of ISIS/3D searching, including conformationally flexible pharmacophore searching. Produced numerous applications for 3D searching and pharmacophore development. Developed training courses for 3D searching.
- Responsible for physicochemical property calculations for MDL databases using Cheshire and external programs – resident expert in QSAR, ADMET prediction, and data mining.
- Responsible for design and performance of XML datasource definitions in DiscoveryGate 2.0, a 13-million structure online information system for drug discovery.

**Strengths**

- Wide experience with the application of computers in chemistry and biology.
- Broad up-to-date knowledge and experience with software for chemical and reaction databases, molecular modeling, and drug discovery.
- Extensive Oracle experience including administering Oracle databases, replication, tuning, data mining, application server, and programming applications.
- Knowledge of third party chemical informatics and data analysis systems, including systems by Daylight, Spotfire, Scitegic, Weka, and Oracle Data Mining.

**Professional Affiliations and Activities**

- American Chemical Society - member since 1970 - COMP, MEDI, CINF and CHED divisions – regular attendee and presenter at national meetings – well published in ACS journals and Symposia.
- QSAR and Modeling society - member since 1980 - regular attendee with presentations and posters at Drug Design Gordon Conferences (formerly QSAR Gordon Conference).
- Molecular Modeling and Graphics Society - member since 1990.
- Sigma Xi, AAAS – member since 1980; Association for Computing Machinery - member since 2000 - SigKDD member.
- Oracle Technology Network - member since 1995 - member of data mining SIG.
- Lecturer and adjunct associate professor, Oregon State University School of Pharmacy since 1990 – deliver annual series of lectures and seminars on drug discovery.
- Instructor, UC Berkeley Extension since 1994 - taught courses in molecular modeling, structure-activity analysis, chemical informatics and scientific data mining.

**Other Activities**

- 2005 to present: Elementary and middle school computer instructor, St. Leander School and Calvary Lutheran School;
- High school and age-group swim instructor and coach since 1970.
- September 1982 to January 1984: Minitab, Inc., statistical programming.
- September 1969 to 1980 retail pharmacist, Colorado and Oregon.