Retention Time Encyclopedia Article

Retention Time

The following sections of this BookRags Literature Study Guide is offprint from Gale's For Students Series: Presenting Analysis, Context, and Criticism on Commonly Studied Works: Introduction, Author Biography, Plot Summary, Characters, Themes, Style, Historical Context, Critical Overview, Criticism and Critical Essays, Media Adaptations, Topics for Further Study, Compare & Contrast, What Do I Read Next?, For Further Study, and Sources.

(c)1998-2002; (c)2002 by Gale. Gale is an imprint of The Gale Group, Inc., a division of Thomson Learning, Inc. Gale and Design and Thomson Learning are trademarks used herein under license.

The following sections, if they exist, are offprint from Beacham's Encyclopedia of Popular Fiction: "Social Concerns", "Thematic Overview", "Techniques", "Literary Precedents", "Key Questions", "Related Titles", "Adaptations", "Related Web Sites". (c)1994-2005, by Walton Beacham.

The following sections, if they exist, are offprint from Beacham's Guide to Literature for Young Adults: "About the Author", "Overview", "Setting", "Literary Qualities", "Social Sensitivity", "Topics for Discussion", "Ideas for Reports and Papers". (c)1994-2005, by Walton Beacham.

All other sections in this Literature Study Guide are owned and copyrighted by BookRags, Inc.

Contents

Retention Time Encyclopedia Article.....1

Contents.....2

Retention Time.....3

Retention Time

Retention time refers to a time frame in which **chemicals** stay in a certain location. The term is sometimes used interchangeably with residence or renewal time, which in **limnology** (aquatic **ecology**) describes the length of time a water molecule or a chemical resides in a body of water. The **residence time** of water is called the hydraulic retention time. It may range from days to hundreds of years, depending on the volume of the lake and rates of inflow and outflow, and is often used in calculations of **nutrient loading**. Retention time can also refer to the length of time needed to detoxify harmful substances or to break down hazardous chemicals in pharmaceutical and **sewage treatment** plants; the length of time chemicals stay in a living organism; or the length of time needed to detect certain chemicals by instruments such as gas **chromatography**.