

Barometer Rising New Canadian Library

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from the 1950s to the 1970s walter gordon was the voice of english canadian nationalism first as chair of the royal commission on canada s economic prospects then as a minister in lester b pearson s cabinet and finally as founder and honorary chair of the committee for an independent canada in the late 1960s many canadians heeded gordon s call for limits on the level of american investment in canadian industry and joined with him to form a broad movement to limit american influence in canada

the first one volume history of canadian fiction covering its growth and development from earliest times to the present day recounting the struggles and the glories of this burgeoning area of investigation it explains canada s literary growth alongside its remarkable history

virtually surrounded by the sea the ocean's salty waters pulse through nova scotia's historic veins nova scotia's rich folklore is steeped in sea related superstitions together with fables myths scottish legends and ghost stories here fishermen have cast their nets for centuries and the abundance of contemporary seafood restaurants and historic lighthouses breathe life into their traditions it includes detailed sections on topics such as wildlife history culture sights and cuisine resident in the province david orkin's insider knowledge provides in depth insight into the best b&b's wineries beaches remote villages and top spots to see moose and seals while cycling and walking interviews with locals bring the destination to life for everyone from the first time visitor to the most seasoned traveller this guide delves deeper than any other guide to reveal the best of this fascinating province both on and off the beaten track

when organization fails why authority matters develops the study of authority as an area of investigation in organizational communication and management as a research topic authority has rarely been addressed in depth in the management and organizational communication literature it is critical however to maintaining unity of purpose and action of the organization and it is frequently cited by organizational members themselves utilizing two case studies examined in depth and based on the accounts of the individuals involved authors james r taylor and elizabeth j van every explore the pathology of authority when it fails they develop a theoretical foundation that aims to illuminate authority by positioning it in communication theory this volume sets the stage for a new generation of scholars who can make their reputations as experts on authority and is intended for scholars and graduate students in organizational communication leadership and discourse analysis it also offers practical insights to consultants and management experts worldwide

changing canada examines political transformations welfare state restructuring international boundaries and contexts the new urban experience and creative resistance

this book offers a short comprehensive history of post war canada all the major events and developments in canadian history are discussed the evolution of the welfare state the growth of economic domination by the united states the halcyon days as a middle power the quiet revolution the first nations quest for autonomy the flowering of english canadian nationalism quebec nationalism the women's

movement neo conservatism and globalization finkel covers political economic social and cultural history in this volume this second edition includes a substantial new chapter that discusses the people events and developments that have dominated the period from 1995 to 2012 this chapter looks at the growing social inequality within canadian society the effects of globalization on canada s industries economy and workers and the increasing environmental challenges that we face extensively illustrated our lives canada after 1945 is a uniquely accessible and comprehensive overview of a period only beginning to attract the attention of historians

this timely book explores how generative artificial intelligence gai is developing and diffusing highlighting the diverse impacts this technology is likely to have on economies and societies it also examines the effects on and the responses of industries where gai has been the most pervasive

caring for the environment developing rural communities and ensuring the survival of minority cultures are all laudable objectives but they can conflict and nowhere more so than the scottish highlands as environmentalists strive to preserve the scenery and wildlife of the highlands the people who belong there and who have their own claims on the landscape question this threat to their culture which dates back thousands of years in this acclaimed and thought provoking book james hunter examines the dispute between highlanders who developed a strong environmental awareness countless generations before other europeans and conservationists whose thinking owes much to the romantic ideals of the nineteenth century more than that he also suggests a new way of dealing with the problem advocating drastic land use changes and the repopulation of empty glens an approach which has worldwide implications

gain the knowledge and skills you need to promote health and prevent disease in canada edelman and kudzma s canadian health promotion throughout the life span second edition describes public health concepts from a canadian perspective helping you to improve community health and reduce health inequities within a diverse population covering the needs of each age and stage of life this book discusses care of the individual family and community all based on the latest research and trends in canadian health promotion new chapters address the timely topics of indigenous health and 2slgtbqi health written by respected canadian educators marian luctkar

flude shannon dames and jane tyerman this book is the only canadian nursing health promotion text on the market

in its 114th year billboard remains the world s premier weekly music publication and a diverse digital events brand content and data licensing platform billboard publishes the most trusted charts and offers unrivaled reporting about the latest music video gaming media digital and mobile entertainment issues and trends

this work shows that business investment in knowledge based capital is a key to future productivity growth and living standards and sets out recommendations in the fields of innovation taxation entrepreneurship and business development corporate reporting big data competition and measurement

is it possible to write an artistically respectable and theoretically convincing religious novel in a non religious age up to now there has been no substantial application of theological criticism to the works of hugh maclellan and morley callaghan the two most important canadian novelists before 1960 yet both were religious writers during the period when canada entered the modern non religious era and both greatly influenced the development of our literature maclellan s journey from calvinism to christian existentialism is documented in his essays and seven novels most fully in the watch that ends the night callaghan s fourteen novels are marked by tensions in his theology of catholic humanism with his later novels defining his theological themes in increasingly secular terms this tension between narrative and metanarrative has produced both the artistic strengths and the moral ambiguities that characterize his work faith and fiction a theological critique of the narrative strategies of hugh maclellan and morley callaghan is a significant contribution to the relatively new field studying the relation between religion and literature in canada

includes policy and scientific overviews atmospheric and oceans processes human health implications of climate change and ozone depletion agricultural ecological and water resource implications implications for coastal planning urban planning the caribbean arctic and various other regions energy implications and developing a framework for international climate change

television and public policy analyzes the current state of television systems in a

selected group of countries exploring the political economic and technological factors that have shaped the sector over the past two decades by positioning the television sector within issues of media policy and the regulatory framework the book questions what these trends mean for television and the historical political and cultural role in our societies

digicat publishing presents to you this special edition of the canadian settler s guide by catharine parr traill digicat publishing considers every written word to be a legacy of humankind every digicat book has been carefully reproduced for republishing in a new modern format the books are available in print as well as ebooks digicat hopes you will treat this work with the acknowledgment and passion it deserves as a classic of world literature

english summary the volume comprises nine essays by prominent canadianists from austria germany and canada who investigate in comparative fashion the problems of emigration immigration to and integration in north america and some european countries especially austria and france they inquire how this challenge has been met in canada since the official adoption of multiculturalism and reflect on the possibility of canada serving as a model for europe while contemporary novels by immigrants to canada provide evidence of successful integration ethnic autobiographies remind us of the existence of problems and prejudices in former times the tensions experienced in the course of a transcultural transfer are shown to be a potential source of inspiration with authors of caribbean background providing fruitful examples the waves of immigration from austria are also described as is the specific approach to the challenge of immigration in the province of quebec through the adoption of the concept of interculturalism both the problems linked to immigration in france and the issue of the millions of undocumented immigrants from latin america in the usa are considered german description der deutsch und englischsprachige band enthält neun essays von bekannten kanadistinnen aus österreich deutschland und kanada die sich mit immigration nach und integration in nordamerika beschäftigen wie wird dieses aktuelle problem in kanada bewältigt konnte das offiziell multikulturelle kanada für länder wie österreich und frankreich ein muster sein neben der gelungenen integration die sich in romanen von selbst nach kanada eingewanderten erzählerinnen spiegelt belegen ethnische autobiographien die früher auch in kanada

häufigen probleme das spannungsverhältnis beim transkulturellen ubergang erscheint als mögliche inspirationsquelle wobei schriftsteller aus der karibik ergiebige untersuchungsobjekte sind die einwanderung aus osterreich kommt ebenso zur sprache wie die spezifische auseinandersetzung mit der immigration in quebec wo das konzept des interkulturalismus dominiert sowie das schicksal von millionen illegaler einwanderer in den usa

can a book about tax history be a page turner you wouldn t think so but give and take is full of surprises a canadian millionaire who embraced the new federal income tax in 1917 a socialist hero j s woodsworth who deplored the burden of big government most surprising of all give and take reveals that taxes deliver something more than armies and schools they build democracy tillotson launches her story with the 1917 war income tax takes us through the tumultuous tax fights of the interwar years proceeds to the remaking of income taxation in the 1940s and onwards and finishes by offering a fresh angle on the fierce conflicts surrounding tax reform in the 1960s taxes show us the power of the state and canadians often resisted that power disproving the myth that we have always been good loyalists but give and take is neither a simple tale of tax rebels nor a tirade against the taxman tillotson argues that canadians also made real contributions to democracy when they taxed wisely and paid willingly

canada and the united states explains across fifteen diverse areas why and how canada and the united states are still so different the book discusses whether or not these differences are growing the key results of such differences and the major challenges to be faced in each system focusing on institutions political cultures and social values the book shows how both federal systems are extremely complex and how our institutions cultures and historical experiences often lead to very different outcomes the fifth edition discusses the emergence of vital new issues including the pandemic and its effects climate change energy requirements increasing international tensions and new trade problems this book also reviews massive budgetary changes new forms of protest emerging in canada and an ongoing political crisis in the us instigated by a former president convincing millions that the 2020 election was a hoax written by leading scholars in their field canada and the united states reveals how the two countries compare when dealing with similar problems that often spill across the

border

the first detailed behind the scenes look at canada us relations during the turbulent 1960s tolerant allies draws extensively on recently declassified canadian and american sources to explore the most important political economic and military elements in the bilateral relationship during the 1960s

this interpretation of the canadian experience extends the monetary approach to balance of payments adjustment that realizes the full implications of international capital mobility

declared dead some twenty five years ago the idea of freedom of contract has enjoyed a remarkable intellectual revival in the fall and rise of freedom of contract leading scholars in the fields of contract law and law and economics analyze the new interest in bargaining freedom the 1970s was a decade of regulatory triumphalism in north america marked by a surge in consumer securities and environmental regulation legal scholars predicted the death of contract and its replacement by regulation and reliance based theories of liability instead we have witnessed the reemergence of free bargaining norms this revival can be attributed to the rise of law and economics which laid bare the intellectual failure of anticontractarian theories scholars in this school note that consumers are not as helpless as they have been made out to be and that intrusive legal rules meant ostensibly to help them often leave them worse off contract law principles have also been very robust in areas far afield from traditional contract law and the essays in this volume consider how free bargaining rights might reasonably be extended in tort property land use planning bankruptcy and divorce and family law this book will be of particular interest to legal scholars and specialists in contract law economics and public policy planners will also be challenged by its novel arguments contributors gregory s alexander margaret f brinig f h buckley robert cooter steven j eagle robert c ellickson richard a epstein william a fischel michael klausner bruce h kobayashi geoffrey p miller timothy j muris robert h nelson eric a posner robert k rasmussen larry e ribstein roberta romano paul h rubin alan schwartz elizabeth s scott robert e scott michael j trebilcock

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The Secret Life of Water: Unraveling the Kw, H₃O⁺, and OH⁻ Mystery

Ever wondered what makes water so... special? Beyond its life-sustaining properties, water hides a fascinating secret: a dynamic equilibrium between its acidic and basic components, governed by a constant called Kw. This seemingly simple molecule is actually a bustling hub of activity, constantly exchanging protons (H⁺) and creating a delicate balance that dictates the acidity or alkalinity of countless solutions, from our blood to our swimming pools. Let's dive deep into the intriguing relationship between Kw, H₃O⁺, and OH⁻, and unravel the magic within a single water molecule.

Understanding Kw: The Ion Product of Water

Kw, the ion product constant of water, is the keystone of this whole discussion. At 25°C, Kw has a value of 1.0×10^{-14} . This seemingly insignificant number represents a profound truth: the product of the concentrations of hydronium ions (H₃O⁺) and hydroxide ions (OH⁻) in pure water is always this constant. In simpler terms, even in pure water, there's a tiny amount of self-ionization occurring. Water molecules are constantly bumping into each other, and occasionally, a proton (H⁺) transfers from one molecule to another, forming H₃O⁺ and OH⁻. Think of it like a seesaw: if the concentration of H₃O⁺ increases (making the solution more acidic), the concentration of OH⁻ must decrease proportionally to maintain the balance dictated by Kw. And vice-versa. This constant relationship is crucial for understanding and manipulating the pH of various solutions.

H₃O⁺: The Reality of Acidity

When we talk about acids, we often think of H⁺. However, a bare proton doesn't exist freely in aqueous solutions. Instead, it instantly binds to a water molecule, forming the hydronium ion (H₃O⁺). This is the true representation of acidity in water. The higher the concentration of H₃O⁺, the more acidic the solution. Consider stomach acid, a highly acidic environment necessary for digestion. The high H₃O⁺ concentration (low pH) is essential for activating digestive enzymes and killing ingested bacteria. On the other hand, a low concentration of H₃O⁺ (high pH) characterizes alkaline solutions like those found in antacids, designed to neutralize stomach acid by reducing the H₃O⁺ concentration.

OH⁻: The Essence of Alkalinity

Hydroxide ions (OH⁻), on the other hand, represent the basic component of aqueous solutions. Just as H₃O⁺ signifies acidity, the concentration of OH⁻ indicates the solution's alkalinity. High OH⁻ concentrations signify a high pH, indicating a basic solution. Many cleaning products leverage this principle. Household ammonia, for example, is a basic solution with a high concentration of OH⁻. This high concentration of OH⁻ ions helps break down grease and dirt, making it an effective cleaning agent. Similarly, lye (sodium hydroxide), with its high OH⁻ concentration, is used in various industrial applications, including soap making.

The pH Scale: A Practical Application

The relationship between K_w , H₃O⁺, and OH⁻ is neatly summarized by the pH scale, which ranges from 0 to 14. A pH of 7 represents neutrality (equal H₃O⁺ and OH⁻ concentrations), while values below 7 indicate acidity (higher H₃O⁺ concentration) and values above 7 indicate alkalinity (higher OH⁻ concentration). The pH scale is logarithmic, meaning each whole number change represents a tenfold change in H₃O⁺ concentration. This scale is extensively used in various fields, from chemistry and biology to environmental science and medicine. For instance, the pH of blood is

tightly regulated around 7.4. Even slight deviations can have serious health consequences. Similarly, soil pH is crucial for plant growth, with different plants thriving in different pH ranges.

Conclusion

The seemingly simple equation governing K_w , H_3O^+ , and OH^- reveals a complex and dynamic interplay within aqueous solutions. Understanding this equilibrium is essential for comprehending a vast array of chemical and biological processes. From the acidity of our stomach to the alkalinity of cleaning solutions, the balance between H_3O^+ and OH^- dictates the properties and functionality of countless systems, highlighting the profound significance of this seemingly simple, yet incredibly important, relationship.

Expert-Level FAQs:

1. How does temperature affect K_w ? K_w increases with temperature. This is because the self-ionization of water is an endothermic process (absorbs heat). Higher temperatures favor this process, leading to a higher concentration of both H_3O^+ and OH^- , although the balance remains dictated by K_w at the given temperature. 2. Can K_w be altered in a solution? While the value of K_w is constant for pure water at a given temperature, it can be effectively altered in solutions containing other ions. The presence of other ions can influence the self-ionization of water, affecting the concentrations of H_3O^+ and OH^- . 3. How does K_w relate to pK_w ? pK_w is simply the negative logarithm (base 10) of K_w . At $25^\circ C$, $pK_w = 14$. This allows for easy calculation and comparison of acidity and alkalinity across different solutions. 4. What are the implications of K_w in biological systems? K_w is fundamental to understanding biological processes that are highly sensitive to pH changes. Enzyme activity, protein folding, and membrane function are all heavily influenced by the delicate balance between H_3O^+ and OH^- . Maintaining the appropriate pH is crucial for the proper functioning of biological systems. 5. How is K_w used in analytical chemistry? K_w is crucial in various analytical techniques used to determine the concentration of unknown acids or bases. Titration, for instance, relies heavily on understanding the

relationship between H_3O^+ , OH^- , and K_w to determine the concentration of an analyte.

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