

REFERENCES

Adams, R.D., Victor, M., and Ropper, A.H. (1997). Epilepsy and seizure disorders.

In R.D. Adams, M. Victor, and A.H. Ropper, eds. *Principles of Neurology*.

6th ed. pp. 313–343. New York: McGraw-Hill.

Albers, G.W., and Peroutka, S.J. (1992). Neurologic disorders. In K.L. Melmon, H.F.

Morelli, B.B. Hoffman, and D.W. Nierenberg, eds. *Melmon and Morelli's Clinical Pharmacology, Basic Principles in Therapeutics*. 3rd ed. pp. 309–337.

New York: McGraw Hill.

Allredge, B.K. (1996). Seizure disorders. In E.T. Herfindal, and D.R. Gourley, eds.

Textbook of Therapeutic Drug and Disease Management. 6th ed. pp. 1005-1033.

Maryland: Williams & Wilkins.

Ambre, J.J., et al. (1995) Antiepileptic drugs. In D.R. Benett ed. *American Medical*

Association Drug Evaluation Annual 1995. pp. 353–397. New York.

Avoli, M. (1997). Mechanisms of antiepileptic drugs. *Science & Medicine*.

July/August: 54 – 63.

Bailey, J.L., (1967). Synthesis of simple peptides. In *Techniques in protein chemistry*.

2nd ed. Netherlands: Elsevier Publishing Company.

Bardel, P., Bolanos, A., and Kohn, H. (1994). Synthesis and anticonvulsant activities

of α -acetamido-*N*-benzylacetamide derivatives containing an electron-deficient

α -heteroaromatic substituent. *J. Med. Chem.* 37: 4567-4571.

- Barry, J.E., Mayeda, E.A., and Ross, S.D. (1977). The amidoalkylation of aromatic hydrocarbons. *Tetrahedron*. 33: 369-372.
- Bechar, E., and Astroug, H. (1997). Synthesis and pharmacological activity of two derivatives of the amide of valproic acid. *Arch. Pharm. Pharm. Med. Chem.* 330: 273-276.
- Bialer, M., et al. (1996). Pharmacokinetic and pharmacodynamic analysis of (E)-2-ene valproyl derivatives of glycine and valpryl derivatives of nipecotic acid. *Biopharm. Drug Dispos.* 17: 565-575.
- Bodanszky, M. (1993) Formation of the peptide bond. In *Peptide chemistry: a practical textbook*. 2nd ed. pp. 55-73. Heidelberg: Springer – Verlag.
- Bodanszky, M., and Bodanszky, A. (1994). Activation and coupling. In *The practical of synthesis*. 2nd ed. pp. 75-126. Heidelberg: Springer – Verlag.
- Carey, F.A., and Sundberg, R.J. (1993). *Advanced organic chemistry Part A: Structure and mechanisms*. 3rd ed. New York: Plenum Press.
- Choi, D., Stables, J.P., and Kohn, H. (1996). Synthesis and anticonvulsant activities of *N*-benzyl-2-acetamidopropionamide derivatives. *J. Med. Chem.* 39: 1907-1916.
- Conley, J.D., and Khon, H. (1997). Functionalized DL- amino acid derivatives. Potent new agents for the treatment of epilepsy. *J. Med. Chem.* 30:567-574.

- Cortes, S., Liao, Z.K., Watson, D., and Khon, H. (1995). Effect of structural modification of the hydantoin ring on anticonvulsant activity. *J. Med. Chem.* 28:601-606.
- Edafiogho, I.O., and Scott, K.R. (1996). Anticonvulsants. In M.E. Wolff, ed. *Burger's Medicinal Chemistry and Drug Discovery*. Vol.3. 5th ed. pp. 175–260. New York: John Wiley & Sons, Inc.
- Elmazar, M.M.A., Hauck, R.S., and Nau, H. (1993). Anticonvulsant and antiepileptic activities of twelve analogues of valproic acid. *J. Pharm. Sci.* 82(12): 1255-1258.
- Furniss, B.S., Hannaford, A.J., Rogers, V., Smith, P.W.G., and Tatchell, A.R. (1978). *Vogel's textbook of practical organic chemistry*. 4th ed. Great Britain: The Bath Press.
- Finkelstein, M. and Ross, S.D. (1972). Anodic oxidation of N-methylformamide and N-methylacetamide. *Tetrahedron*. 28: 4497–4502.
- Fox, S.W., and Foster, J.F. (1957). Synthesis of peptides. In *Introduction to protein chemistry*. pp. 160-174. USA: John Wiley & Sons.
- Fresenius, W., Huber, J.F.K., Pungor, E., Rechnitz, G.A., Simon, W., and West, Th.S. (1989). *Tables of spectral data for structure determination of organic compounds*. 2nd ed. Berlin: Springer-Verlag.
- Hadad, S., and Bialer, M. (1995). Pharmacokinetic analysis and antiepileptic activity of N-valproyl derivatives of GABA and glycine. *Pharm. Research*.

12(6):905-910.

Hadad, S. and Bialer, M. (1997). Pharmacokinetic analysis and antiepileptic activity of two new isomers of N-valproyl glycinamide. *Biopharm. Drug Dispos.* 18(7): 557-566.

Hadad, S., Vree, T.B., Kleijn, E.V.D., and Bialer, M. (1992) Pharmacokinetic analysis of ester prodrugs of valproic acid. *J. Pharm. Sci.* 81(10): 1047–1050.

Hadad, S., Vree, T.B., Kleijn, E.V.D., and Bialer, M. (1993). Pharmacokinetic analysis and anticonvulsant activity of two polyesteric prodrugs of valproic acid. *Biopharm. Drug Dispos.* 14: 51–59.

Haj-yehia, A., and Bialer, M. (1989). Structure–pharmacokinetic relationships in a series of valpromide derivatives with antiepileptic activity. *Pharm. Research.* 6(8): 683–689.

Kohn, H., Sawhney, K.N., Bardel, P., Robertson, D.W., and Leander, J.D. (1993). Synthesis and anticonvulsant activities of α -heterocyclic and α -acetamido-*N*-benzylacetamide derivatives. *J. Med. Chem.* 36: 3350-3360.

Kohn, H., Sawhney, K.N., Legall, P., Conley, J.D., Robertson, D.W., and Leander, J.D. (1990). Preparation and anticonvulsant activity of a series of functionalized α - aromatic and α - heteroaromatic amino acid. *J. Med. Chem.* 33: 919-926.

Kohn, H., Sawhney, K. N., Legall, P., Conley, J. D., Robertson, D. W., and Leander,

- J.D. (1991). Preparation and anticonvulsant activity of a series of functionalized α - heteroatom substituted amino acid. *J. Med. Chem.* 34: 2444-2452.
- Levi, M., Yagen, B., and Bialer, M. (1997). Pharmacokinetics and antiepileptic activity of valproyl hydroxamic acid derivatives. *Pharm. Research.* 14(2): 213-217.
- March, J. (1968) *Advanced organic chemistry: reactions, mechanisms, and structure.* International student ed. Japan: McGraw-Hill Kogakusha
- McNamara, J.O. (1996). Drugs effective in the therapy of the epilepsies. In J.G. Hardman, L.E. Limbird, P.B. Molinoff, R.W. Ruddon, and A.G. Gilman, eds. *Goodman & Gilman's the Pharmacological Basis of Therapeutics.* 9th ed. pp. 461-486. New York: McGraw-Hill.
- Palaty, J. and Abbot, F.S. (1995). Structure-activity relationships of unsaturated analogues of valproic acid. *J. Med. Chem.* 38: 3398-3406.
- Patsalos, P.N., and Sander, J.W.A.S. (1994). Newer antiepileptic drugs towards an improved risk-benefit ratio. *Drug Safety.* 11(1): 37-67.
- Pornchai Rodesittisuk (1996). *Synthesis of unsaturated N-(2-propylpentanoyl) urea analogues.* Master's Thesis, Chulalongkorn University.
- Prous, J.R., ed. (1994). Antiepileptic drugs. *The Year's Drug News Therapeutic Targets.* pp. 55-59. Spain: Praus Science Publishers.
- Radatz, M., Ehlers, K., Yagen, B., Bialer, M., and Nau, H. (1998). Valnoctamide

valpromide and valnoctic acid are much less teratogenic in mice than valproic acid. *Epilepsy Research*. 30: 41-48.

Rogawski, M.A., and Porter, R.J. (1990). Antiepileptic drugs: pharmacological mechanisms and Clinical efficacy with consideration of promising developmental stage compounds. *Pharmacological Reviews*. 42(3): 223–286.

Ruengwit Kitbunnadaj. (1996). *Synthesis of O-alkyl or O-acyl derivatives of 2-propylpentanohydroxamic acid*. Master's Thesis, Chulalongkorn University.

Scott, K.R., Moore, J.A., Zalucky, T.B., Nicholson, J.M., Lee, J.A.M., and Hinko, C.N. (1985). Spiro[4.5] and spiro[4.6] carboxylic acids: cyclic analogues of valproic acid. Synthesis and anticonvulsant evaluation. *J. Med. Chem.* 28: 413-417.

Sheehan, J.C., and Hess, G.P. (1955). A new method of forming peptide bonds. *J. Am. Chem. Soc.* 77: 1067.

Su, D.L. , Huang, J.T., Burchenal, J.H. ,Watanabe, K.A. ,and Fox , J.J. (1986) .
Synthesis and biological activities of 5-deaza analogues of aminopterin and folic acid . *J. Med. Chem.* 29: 709-715.

Thongchai Sooksawate (1995). *Anticonvulsant effects of N-(2-propylpentanoyl)urea* .
Master's thesis , Chulalongkorn University .

Varia, S.A., Schuller , S., Sloan, K.B., and Stella, V.J. (1984). Phenytoin prodrugs III : water-soluble prodrugs for oral and/or parenteral use. *J. Pharm. Sci.* 73(8): 1068-1073.

Wade, JR., L.G. (1991). *Organic chemistry*. 2nd ed. Anglewood cliffs: Prentice-Hall International Inc.

Wicharn Janwitanuchit . (1992). *Synthesis of valproic acid analogues*. Master's thesis, Chulalongkorn University.

Wicharn Janwitayanuchit, and Chamnan Patarapanich (1990). Synthesis of 1-(2-propylpentanoyl)-2-pyrrolidinone as potential anticonvulsant agent. *Th. J. Pharm. Sci.* 15(2): 87-92.

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